

A COMPUSERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

ONLINE

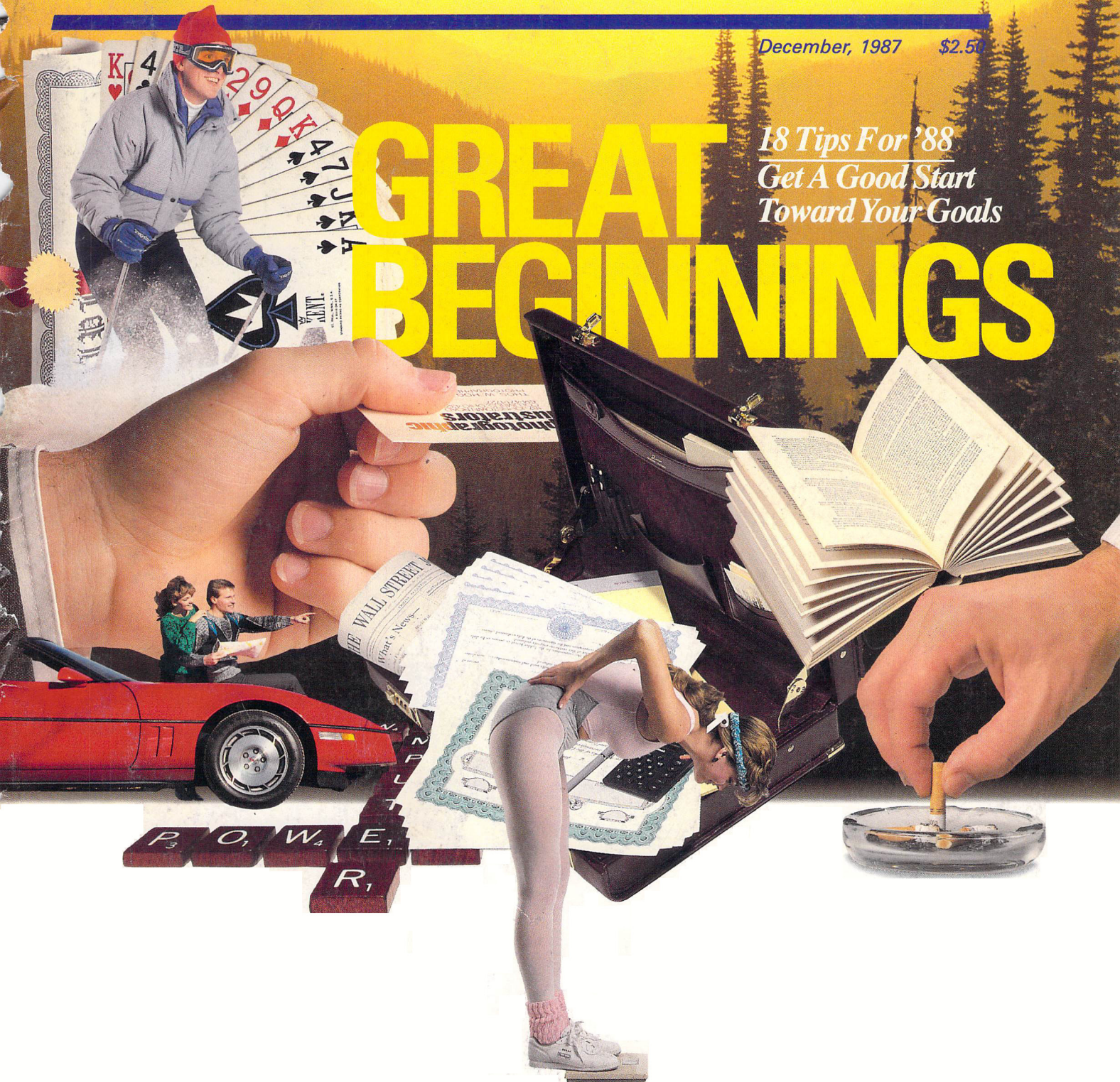
T O D A Y

THE COMPUTER COMMUNICATIONS MAGAZINE

December, 1987 \$2.50

GREAT BEGINNINGS

*18 Tips For '88
Get A Good Start
Toward Your Goals*



**What's the earliest flight
out of Chicago?**

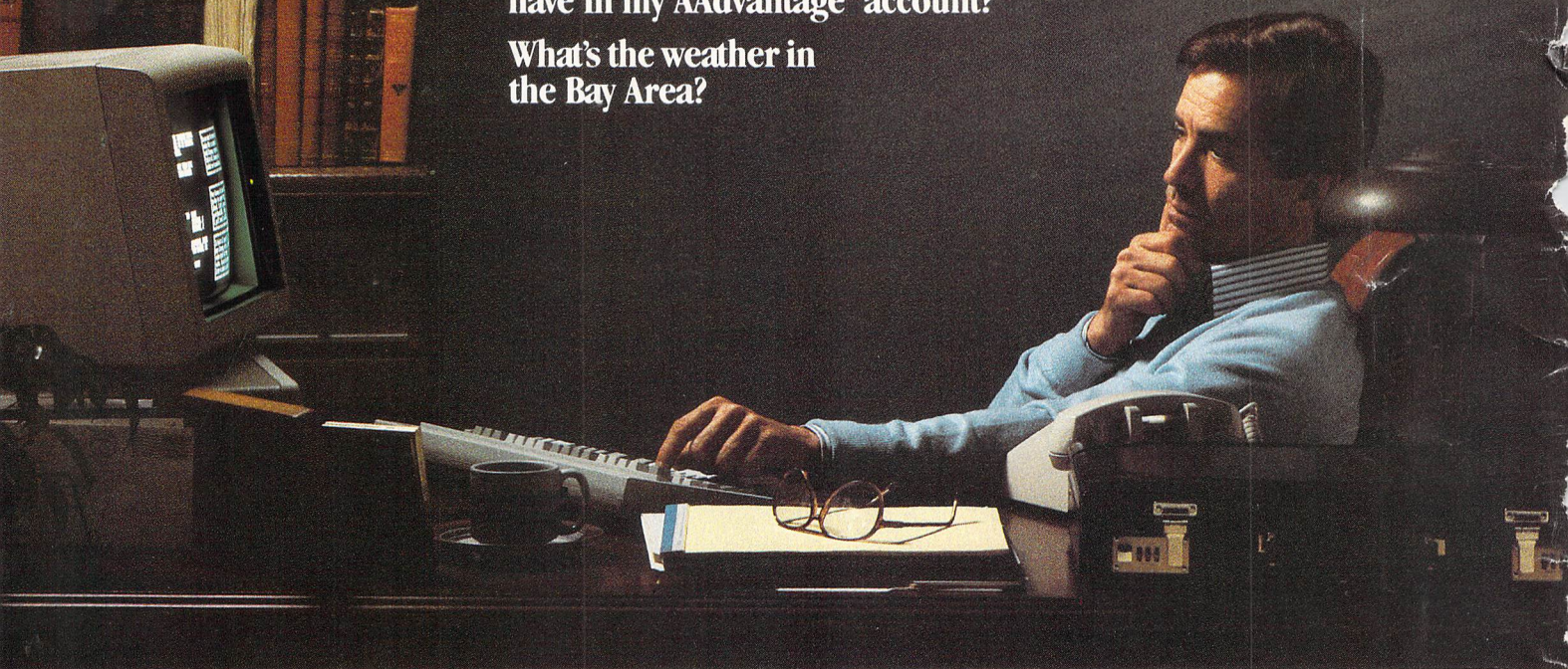
**What's the lowest round-trip
fare available from
Chicago to San Francisco?**

**Which hotels are located near
the airport in San Francisco?**

**Who offers the best rate on
a midsize rental car?**

**How many miles do I currently
have in my AAdvantage[®] account?**

**What's the weather in
the Bay Area?**



The answer is EAASY SABRESM. Now, what's the question?

For years, the travel industry has relied on American Airlines SABRE reservations system to make travel planning easy. And you can too. Because now you can access EAASY SABRE — the American Airlines personal reservations and information system. All you need is a PC with a phone modem, or any kind of communicating terminal, and a subscription to one of the data networks listed below.

You'll find EAASY SABRE provides fast, accurate solutions to all your travel planning needs. Because with schedules for over 650 airlines, information on more than 25 million fares and access to over

13,000 hotels and 25 car rental agencies, there's virtually no travel need that EAASY SABRE can't help you with.

You can use the system to find the fastest route to your destination. Or the lowest fare. You can even check on your AAdvantage[®] travel awards program account or look up the weather report for the cities you're visiting. With our Bargain FinderSM feature, you can take advantage of the lowest fares available.



EAASY SABRESM is a product of SABRE Travel Information Network.

And since it's available 24 hours a day, 7 days a week, EAASY SABRE can help you make your plans when it suits you best.

Once you've made your reservations, your tickets can be collected from any SABRE automated travel agency or corporate travel office, at the airport, at any American Airlines city ticket office, or by mail.

So you see, EAASY SABRE puts answers to all your travel questions right at your fingertips. And when you consider there's no surcharge for using the EAASY SABRE system, the only remaining question is why you're not already using it.

For the online advantage in making airline, hotel and car rental reservations GO-EZS.

AAdvantage[®] is a registered service mark of American Airlines, Inc. AAdvantage program rules, regulations, travel awards and special offers are subject to change without notice and subject to any applicable foreign laws.

GO OLI or circle 1 on the Reader Service Form.

WONDERWOMAN!

How Instant Demographics™ and I found new banking, mall and health care sites . . . over a cup of coffee.

Clients think I'm a "genius consultant", but it's really CACI's remarkable information system that makes me so smart and so fast.

My banking client now knows where to open two new branches, where to locate 26 ATMs, and where to push IRAs. My health care client knows not only what areas will need the nursing homes he's building but what areas can afford them. My shopping mall client can compare sales potential figures for 9 types of retail stores at 3 potential sites.

I got them all of this information over 3 cups of coffee one day last week. That's when "Wonderwoman" became my name.

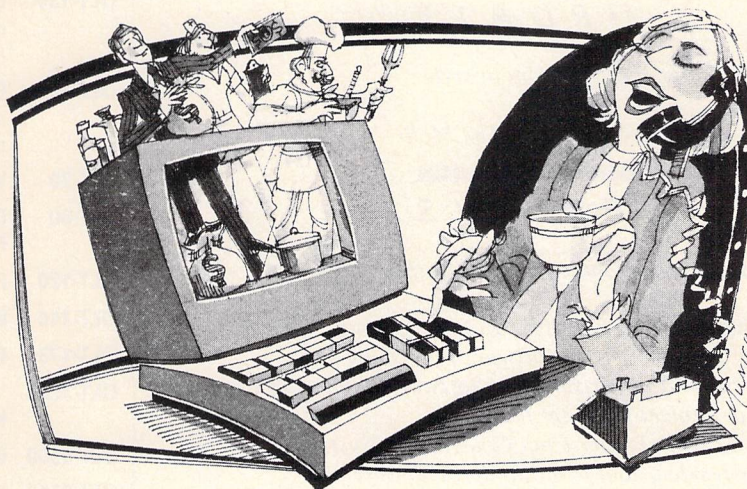
The world's largest up-to-date database of demographic and buying power facts and forecasts is on CompuServe!

The genius is in CACI's incomparable data and their expert Market Specialists and Demographers. Together, we can manipulate the latest, most accurate income, demographic, and sales potential data—this year's, as well as historic and projected figures.

Between sips I can search, screen, and rank-order information from more than 60 million data items.

Data for any market size or shape.

I can zero in on specific intersections, ZIP codes, census tracts, circles of any radius, coffee stains on the map—



"You were right! Your market's out there, and we've found it."

markets of any size or shape. Or counties, ADI's, states, you name it. I can analyze one site or compare a thousand.

At the tips of my fingers—thousands of custom reports.

I can customize any of more than 40 available reports—including 16 different retail and 3 financial sales potential reports.

Today's data and tomorrow's.

Thanks to CACI's National Board of Demographers—renowned informa-

tion experts—my clients are assured that the projections I give them are the very best available—no matter how far away we get from the last census.

And now, with my next cup of coffee or two, I'll work a few more wonders . . . a shopping center analysis for my new real estate client, some demographic analyses for my medical client, and several new site analyses for my franchising clients.

I can help all kinds of businesses.

I can customize reports on investments, savings, loans, apparel, footwear, sporting goods, groceries, drugs, dining out, department stores, home improvements and auto aftermarket.

Mine for the asking, yours, too!

Use CACI's Instant Demographics ON-LINE and Custom Data Services for your ongoing market data needs. Just call 800-292-2224 (press #3) and talk to an On-Line Representative who can help you become a wonder, too. In Virginia, 703-876-2333.

CACI/Instant Demographics

Market Intelligence for Decision Makers.™

8260 Willow Oaks Corporate Drive, Fairfax, VA 22031

New York • Washington, D.C. • Los Angeles • London • Amsterdam.

SITELINE and Market Intelligence for Decision Makers are service marks of CACI, Inc. Federal.

GO OLI or circle 2 on the Reader Service Form.

C O N T E N T S

PRINT EDITION

FEATURE

14 Great Beginnings

Start the new year right with seasonal tips for self-improvement.

TRAVEL

29 Aloha Online

Head for Hawaii's exotic island paradise.

BUSINESS

33 Timely Tax-Planning Tips

Taxpayers can save money and yield high returns.

UPDATE

36 Help for the Holidays

Online services help you wrap up the season in style.

40 Sources for Shoppers

Last-minute shopping suggestions abound in The Mall.

REVIEWS

44 Hardware

Genoa SuperEGA Board video adapter from Genoa Systems Corp.

46 Software

Drafix 1 Plus CAD enhancer from Foresight Resources Corp.

First Publisher desktop publisher from Software Publishing Corp.

PFS: Professional Write word processor from Software Publishing Corp.

Create A Calendar appointment program from Epyx

Vopt Disk Organizer file housekeeper from Golden Bow Systems

MemoryMate memory-resident tool from Bröderbund Software

Zing! memory-resident maintenance utilities from Meridian Software

54 Books

Free (and Almost Free) Software for the Macintosh—Crown Publishing Group

The Illustrated Handbook of Desktop Publishing and Typesetting—Tab Books

Lotus 1-2-3 Desktop Companion—Sybex

dBase III Plus: Advanced Applications for Nonprogrammers—Tab Books

The Insider's Guide to IBM PC Hardware and Software—Scott, Foresman and Co.

DEPARTMENTS

4 Dear Reader

8 Letters

10 Monitor

13 Beginner's Corner with David Peyton

34 Business Briefs

37 New Product Updates

41 Gift of Time

42 Ask Customer Service

43 Uploads: New Forum Files

57 Industry Watch

64 Online with Charles Bowen

ELECTRONIC EDITION

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

GO OLT **A GO-Page Directory** of the day's top computer industry news and a summary of key OLT page numbers.

OLT-160 **The Monitor Daily News** main menu.

OLT-90 **Today's Computer and Information Industry News.**

OLT-20 **The Current Week's Monitor News.**

OLT-130 **Behind the Screens.** Computer and information industry news, rumor and gossip.

OLT-50 **CompuServe Update** main menu. Lists all CompuServe news departments.

OLT-70 **What's New on CompuServe.**

OLT-80 **CompuServe Community News.**

OLT-120 **Forum Conference Schedules.**

OLT-140 **Beginner's Corner.**

OLT-175 **Columns by Dan Gutman.**

OLT-3200 **"Ask Dr. John" by John Heilborn.**

OLT-3500 **Online with Charles Bowen.**

OLT-3700 **Uploads.** A bi-weekly column summarizing new files in forum data libraries.

OLT-1000 **Computer Events Calendar.**

OLT-2000 **OLT Special Reports.**

OLT-30 **Letters to the Editor** main menu.

OLT-200 **Electronic Edition Reviews** main menu.

OLT-220 **Hardware Reviews** main menu.

OLT-230 **Software Reviews** main menu.

OLT-240 **Book Reviews** main menu.

OLT-250 **New Product Announcements** main menu.

EBB-11 **Instructions** on use of the Electronic Bounce Back reader service system.

EBB-160 **Online Today Display Ads** main menu.

EBB-70 **Shopper's Guide.**

Online Today is published monthly in the United States of America by CompuServe Incorporated, 5000 Arlington Centre Blvd., Columbus, OH 43220. Application to mail at Second-Class postage rates is pending at Columbus, Ohio, and additional mailing offices. POSTMASTER: Send address changes to *Online Today* Reader Administration, P.O. Box 20212, Columbus, OH 43220-2913.

Cover: Mountain scene/Comstock photo: Tom Grill

Season's Greetings

From



GO OLI or circle 3 on the Reader Service Form.

D E A R R E A D E R

From the response of readers to a cover article earlier this year ("How to Do Anything Better on CompuServe," March 1987), we realized it was, as they say, "the start of something big." We decided it was time for an editorial encore but with a seasonal twist: how to make a fresh start with self-improvement goals for the new year.

Many of us embark on personal goals with determination, but sometimes a lack of informational resources or lack of contact with others pursuing similar objectives can lead to discouragement. With sophisticated search databases and forums for interactivity among people of like interests, online information services can eliminate many of the traditional obstacles to achieving goals.

Whether you're trying to adopt new habits—regular workouts, continuing education, hobbies, weekend getaways—or leave behind old ones—anything from procrastination to smoking—you're likely to find useful tips in this month's cover story, "Great Beginnings." A collaborative effort of more than 15 "how to" articles by several *Online Today* writers, it begins on page 14.

* * *

In line with the "Great Beginnings" theme, we will be making some additions to *Online Today* during the coming months, and the end result will be more coverage of specialized areas, such as news and reference services, forums and entertainment. Due to feedback from readers, we're planning to increase the scope and number of "how to" articles as well. With this issue, we've initiated a change in the Business section to put more emphasis on financial application articles. The articles about downloading financial data to spreadsheets and downloading stock quotes (on pages 34-35) are an example of this change. Also this month, we're introducing a Travel section to provide information about vacation destinations and to show you how to make travel plans online. Read about arranging an island itinerary in the first destination article about Hawaii, beginning on page 29.

* * *

Finally, we thought you may be interested in some "Help for the Holidays." On page 36 you'll find gift suggestions from The Electronic Mall, Demographic services, Microsearch, Information USA and more. There's even information on how to get a free Christmas tree.



Douglas G. Branstetter
Editor

ONLINE T O D A Y

Online Today®, December 1987

Volume 6 Number 12

Publisher

Calvin F. Hamrick III

Editorial Director

Richard A. Baker

Editor

Douglas G. Branstetter

Art Director

Thom Misiak

Managing Editor

Mary Mitchell

Associate Editor

Kassie Rose

Assistant Editor

Denise M. Erwin

Contributing Editors

Charles E. Bowen, Cathryn Conroy, John Edwards, Carole Houze Gerber, Ernest E. Mau, Byron T. Scott

Copy Editor

Kacy Cook

Editorial Assistants

Richard Brownell, Robert Loomis

Production Coordinator

Barbara Cagley

Photocomposition Coordinator

Susan Toombs

ADVERTISING SALES

Associate Publisher

Peter A. Scott, 5000 Arlington Centre Blvd., Columbus, OH 43220; 614/457-8600

Northeast Hajar Associates Inc., P.O. Box 345, Norwood, MA 02062; 617/769-8950; Paul Hajar, Carol Andersen

Mid Atlantic Nelson Associates Inc., 55 Scenic Dr., Hastings-on-Hudson, NY 10706; 914/478-0491; Bonnie Nelson

Southeast Fox Associates Inc., Suite 275, 6100 Lake Forrest Dr., Atlanta, GA 30328; 404/252-0968; Rick Gower, Fran Farmer

Midwest Kingwill Inc., 4433 W. Touhy Ave., Chicago, IL 60646; 312/675-5755; Dave Kingwill, Baird Kingwill

Northwest Fox Associates Inc., 870 Market St., San Francisco, CA 94102; 415/989-5804; Stephen E. Schwanz

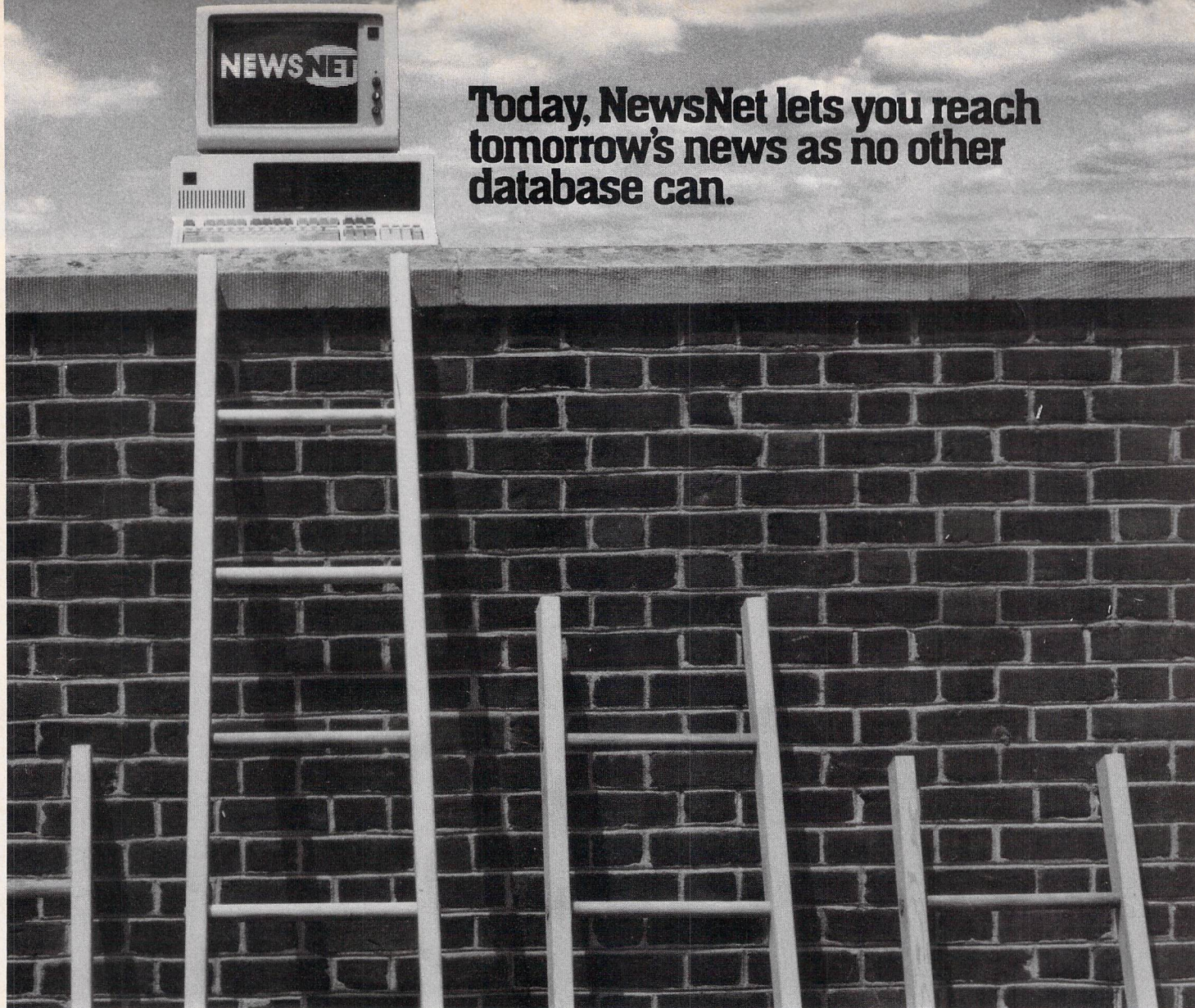
West The Faust Co., 24050 Madison St., Suite 100, Torrance, CA 90505; 213/373-9604; Richard Faust, Doug Faust, Robyn Faust

Southwest Hajar Associates Inc., 2995 LBJ Freeway, Suite 200, Dallas, TX 75234; 214/888-1169; Barbara Jones



President and Chief Executive Officer, Charles W. McCall; **Executive Vice President, Information Services**, Maurice A. Cox; **Executive Vice President, Business Services**, Robert J. Massey; **Executive Vice President, Support Services and Chief Technical Officer**, Alexander B. Trevor; **Executive Vice President, Network Services**, G. Clark Woodford; **Senior Vice President, Business Support and Development**, Barry F. Berkov; **Vice President, Market Development and Services**, John E. Meier; **Vice President, Human Resources**, Judith K. Reinhard; **Vice President, Finance**, Jeffrey T. Weisner.

Copyright©1987 by CompuServe Incorporated an H&R Block Company. All rights reserved. Contents may not be reproduced in whole or in part without written permission of publisher. *Online Today* is a registered trademark of CompuServe Incorporated. Printed in USA by R.R. Donnelley & Sons Co., Chicago. Subscriptions: United States, AFO—\$30 one year; Canada and elsewhere \$40 one year. Single copies \$2.50 in US, AFO and Canada. Telephone: 614/457-8600. *Online Today* assumes no responsibility for return or safety of unsolicited matter. Direct editorial correspondence to: Editor, *Online Today*, P.O. Box 20212, Columbus, OH 43220. Advertising Reader Service: Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.



Today, NewsNet lets you reach tomorrow's news as no other database can.

NewsNet is the only online source for newsletters. Complete and Unabridged.

With NewsNet you have instant access to in-depth, insider reports from the most respected experts in fields like telecommunications, aerospace, defense, electronics, computers, investments, finance and more. And not just abstracts or headlines. You get the full texts of articles and opinions on regulatory and environmental issues, requests for bids, contract awards, new products, contacts—information that's vital to managing your business—from over 320 industry-specific newsletters and 11 worldwide wire services. And, before it's available in print.

In fact, most of our information you won't find elsewhere—ever. Because 70% of our information is exclusive. Plus, 30% of it never appears in print.

NewsNet alerts you to the latest developments before other databases can.

NewsNet delivers the latest updates you need in real time with only fractional delays. Because our database has virtually no time embargoes.

And our SDI service, NewsFlash®, is leagues ahead of the others. NewsFlash continuously clips items on exactly the subjects you specify—24 hours a day. Each time you log on, your NewsFlash hits are posted for instant retrieval.

\$60.00 of FREE online time.

Now, with your annual subscription to NewsNet, we give you \$60.00 worth of FREE online time. Subscribe today and reach for new heights in faster and more comprehensive information retrieval.

To subscribe, call toll-free today:

1-800-345-1301

NEWSNET

Before it's in print, it's on NewsNet.

945 Haverford Road, Bryn Mawr, PA 19010
215 527-8030

© Copyright, 1987, NewsNet, Inc. NewsNet® and NewsFlash® are registered service marks of NewsNet, Inc.

GO OLI or circle 4 on the Reader Service Form.

THIS TIME WE OUTSMARTED

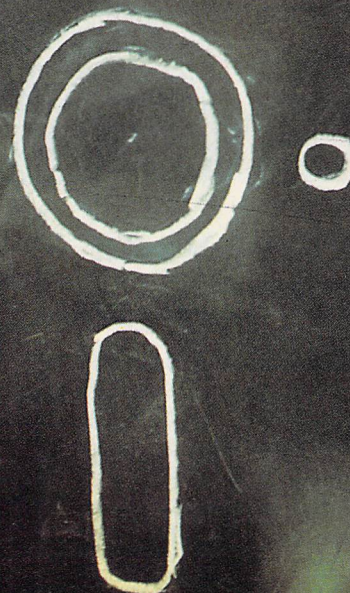
115,200
Baud Rate

SCOPE™
Advanced
Scripting
Language

Peruse
Buffer

Hayes Smartcom III

~~~~~  
~~~~~



EVEN D OURSELVES.

We at Hayes have always been credited with being ahead of our time. Now, we're even ahead of ourselves. Introducing Smartcom III,[™] clearly the most advanced, full-featured communications program ever designed for the IBM[®] PC-XT, AT, PS/2 family and your Hayes modem.

Smartcom III includes on-line help facilities for the novice as well as more advanced features for the power user. Features like a peruse buffer to automatically store information for later disk capture, printing or editing, an editor for creating and revising text, both on-line and off-line, and the support for multiple communications sessions with two remote systems simultaneously. Smartcom III also offers on-line DOS operations for the performance of common disk and subdirectory operations without ever having to exit the Hayes program. It even provides file compression and scrambling techniques for the enhancement of effective throughput and private data transmission.

Plus, with Smartcom III's Simple Communications Programming Environment, SCOPE,[™] the transmission process can be totally automated. This easy-to-use scripting language comes complete with a learn mode and provides access to the programming tools used to create Smartcom III itself.

So now that you know what Smartcom III is capable of, you may wonder where intelligence of this caliber will lead you. And the answer to that is the future.

If you currently use Smartcom II[®] or Crosstalk[®], take advantage of our special introductory offer:

If you purchased Smartcom II prior to 1/1/87, return the original program disk to us along with \$60 and we'll upgrade you to Smartcom III; if you purchased Smartcom II after 1/1/87, return it along with \$30 and dated proof of purchase for a Smartcom III upgrade. And if you use Crosstalk, send any version of the original program disk along with \$60 and we'll give you the same Smartcom III upgrade.

This offer good through 12/31/87 only in the USA and Canada.

For more information, contact your local Hayes Dealer, write Hayes at the address below, or call 404-441-1617.

Hayes[®]



Hayes Microcomputer Products, Inc., P.O. Box 105203, Atlanta, GA 30348.

GO OLI or circle 5 on the Reader Service Form.

Full-Featured
Editor

File
Compression

New Transfer
Protocols

Book Review Comments

Your book review of *Advanced Microsoft Word* (August issue, page 49) came at an appropriate time since we were just starting to use that program. Imagine our surprise—after the book was ordered from our library, cataloged and stamped (no returns now possible)—when we found that the book refers only to the IBM PC version of Microsoft Word. This fact is not men-

tioned in the review. Consequently, the book was of no use with the Macintosh computers in our department.

William White
Director of Research
Siemens Gammasonics Inc.
Des Plaines, Ill.

Editor's Note: Online Today regrets the omission.

Listing Service Information

Online Today is helpful. I appreciate receiving it. However, it would be even more helpful if you could include a listing of the cost of accessing forums and databases when you describe them.

Ronald Heinze
Charlotte, N.C.

Editor's Note: When an online database carries a surcharge, it is our policy to include that information in the article.

Online Today Electronic Edition

I tried to access *Online Today Electronic Edition*, but there are no instructions for doing so. I found menus and narrative text but no directions for reading *Online Today*. Please advise me what to do.

Edward Day
Detroit, Mich.

Editor's Note: To reach Online Today Electronic Edition, type GO OLT at any CompuServe Information Service prompt. You will arrive at a menu that serves as our "front page," listing headlines of the latest computer industry news articles and the electronic pages for them. The "front page" also lists page numbers for our major departments. To access any of these stories or sections, simply type GO and the page number (i.e., GO 90 for the latest news).

Call waiting

In response to Carol Mackey's question regarding call waiting (Letter in September issue, page 6), I have a suggestion. To disable call waiting, I precede any telephone number with a *70. This process disables call waiting for one telephone call and reinstates it after I've completed the call.

All of my macros have this capability, and I haven't had a "call waiting dump" since I've tried this. I'd advise anyone interested in disabling call waiting to contact the local telephone company business office for details.

Marty Silbernig
Chicago, Ill.

Correction

In the article "Executive Option: Not for Executives Only" (October issue, page 31), the benefits offered to Executive Option subscribers were incorrectly stated. Specifically, complimentary tours of Executive Option services and six hours of usage credit, listed in the article, are not available.

There's a world of knowledge waiting...



all he has to do is touch a button.

Imagine touching a button and getting the latest information on science, the arts, sports, history, technology, medicine, geography, and much more. Imagine an encyclopedia that's updated every 3 months. Imagine a library that never closes. Now, you can give your child all of these things with Grolier's *Academic American Encyclopedia*® — the "premier" online encyclopedia.

- More than 31,000 articles at your child's fingertips — covering everything from archeology to zoology.
- Special Fact Boxes provide important information about every country in the world, every state in the U.S., and every U.S. president.

- Updated four times a year to help your child stay on top of new technologies, current affairs, scientific breakthroughs, and much more.
- Extensive cross-referencing directs your child to other relevant articles.

Imagine — an online encyclopedia that keeps pace with your child's enthusiasm for learning.

Subscribe today — GO AAE on CompuServe®.

Also on CompuServe® — GO WHIZ to play The Whiz Quiz™ trivia game.



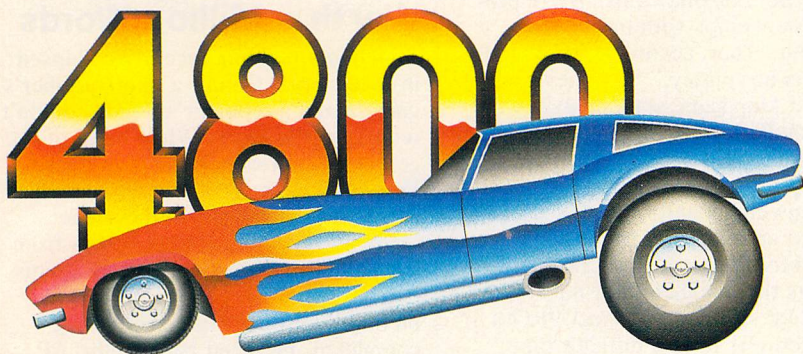
Grolier Electronic Publishing, Inc.
95 Madison Avenue
New York, New York 10016

GO OLI or circle 6 on the Reader Service Form.

Academic American Encyclopedia is a registered trademark of Grolier Incorporated, Danbury, CT.

The Whiz Quiz is a trademark of Grolier Electronic Publishing, Inc. CompuServe is a registered trademark of CompuServe Incorporated.

FAST COMPANY



FAST In its "B" configuration, the UDS 208A/B moves data at 4800 bps, half-duplex, over dial-up telephone lines. Its auto-answer feature permits unattended operation, and auto-dialing capability can be added. Three simple strap changes convert the device to the "A" configuration, permitting full-duplex operation over four-wire circuits.



FASTER The 9600A/B is UDS' answer to the demand for 9.6 kbps communication. Like its 2400 bps counterpart, it can be changed from dial-up to dedicated line configuration (or vice versa) in the field. Complete self-test and remote loop-back capabilities simplify system diagnostics; the modem is available as a free-standing unit or as a rack-mountable card.



FASTEST Now you can push your dial-up data communications system all the way to 14.4 kbps! The UDS 14.4A/B is trellis coded, giving you top performance, even under undesirable line conditions. Fall-back data rates of 12 and 9.6 kbps are provided. Contact Universal Data Systems, 5000 Bradford Drive, Huntsville, AL 35805. Phone 205/721-8000; Telex 752602 UDS HTV.

UDS for fast dial-up modems.



Universal Data Systems



MOTOROLA INC.
Information Systems Group

UDS modems are offered nationally by leading distributors. Call the nearest UDS office for distributor listings in your area.
DISTRICT OFFICES: Apple Valley, MN, 612/432-2344 • Atlanta, GA, 404/998-2715 • Aurora, CO, 303/368-9000 • Blue Bell, PA, 215/643-2336 • Boston, MA, 617/875-8868 • Columbus, OH, 614/895-3025 • East Brunswick, NJ, 201/238-1515 • Glenview, IL, 312/998-8180 • Houston, TX, 713/988-5506 • Huntsville, AL, 205/721-8000 • Livonia, MI, 313/522-4750 • Mesa, AZ, 602/820-6611 • Milwaukee, WI, 414/273-8743 • Mission Viejo, CA, 714/770-4555 • Mountain View, CA, 415/969-3323 • Renton, WA, 206/235-9977 • Richardson, TX, 214/680-0002 • St. Louis, MO, 314/434-4919 • St. Peters, MO, 314/434-4919 • Silver Spring, MD, 301/942-8558 • Tampa, FL, 813/684-0615 • Uniondale, NY, 516/222-0918 • Van Nuys, CA, 818/891-3282 • Willowdale, Ont, Can, 416/495-0008 • Winston-Salem, NC, 919/760-4184

GO OLI or circle 7 on the Reader Service Form.

Created by Dayner/Hall, Inc., Winter Park, Florida

Chips Convert Cars into 'Autobahnstormers'

Today, when car-conscious teenagers get excited about a PROM, they're probably talking about a "programmable read-only memory" chip, not an upcoming school dance.

The PROM chip is the heart of every on-board automobile computer. The chip controls fuel delivery based on rpm and load, and maintains correct ignition timing. Unfortunately, from a car enthusiast's standpoint, the chip also restricts optimum performance—auto makers program the devices to boost mileage and limit air pollution.

Therefore, not surprisingly, speed shops and mail-order automotive parts distributors are doing a brisk business in replacement PROMs—chips that cause cars to guzzle gas, foul the air and zoom like the muscle machines of days past. General Motors cars built since 1981 are the most popular targets of microchip hot rodders. Late model GM vehicles feature socketed PROMs, making chip installation as easy as flicking an ignition switch.

For instance, Hypertech, a Memphis PROM manufacturer (901/382-8888), sells three types of chips covering almost every GM car made since 1981. For imports, Veloz Car Computers of Foster City, Calif. (415/573-0308), has a chip that allegedly turns a mild-mannered BMW into a blazing Autobahnstormer. (Veloz, incidentally, was founded by David Welch, a former Atari programmer.)

Whether this is legal depends on who you talk to. A GM spokesman refused to comment, other than to note that its computer programs are protected by copyright. But David Stanley, a New York attorney who advises a major automobile manufacturer, says the companies "are looking into the

matter and gathering evidence." He notes, "I don't think the auto makers are going to allow this to go on much longer."

However, John Martaans, who operates a small Ft. Lauderdale PROM programming firm, claims the car makers have no case against his industry. "We're not copying chips. We're producing new chips with original programming. That, according to my definition, is not piracy." Attorney Stanley disputed Martaans' statement: "A lot of chip sellers are merely copying and modifying original programs. That is indeed piracy."

Meanwhile, California car enthusiasts face an additional complication: The California Air Resources Board prohibits the installation of uncertified chips. Not surprisingly, most PROM manufacturers have a difficult time getting their chips to meet CARB guidelines, although several companies are attempting to accommodate the standards by producing watered-down versions of their chips.

But governmental restrictions may become more widespread if the chip replacement trend continues, warns Stanley. "These companies are obviously using a loophole," he says. "State and local governments, under pressure from the EPA and other authorities, may just regulate the aftermarket chip makers out of business."

You can learn more about microchip hot rodding and other automotive technical subjects from the car experts in the Auto Racing Forum (GO RACING) on CompuServe.

—John Edwards

High-Tech Helpers May Automate Fast Food

Is nothing safe from automation? Now, even the time-honored career of hamburger slinger may soon fall victim to robots and associated equipment.

Researchers at the University of Wisconsin at Stout have cooked up an automated system to broil burgers. If science has its way, the jobs currently held by millions of teens may eventually go the way of lamplighters and buggy whip salesmen.

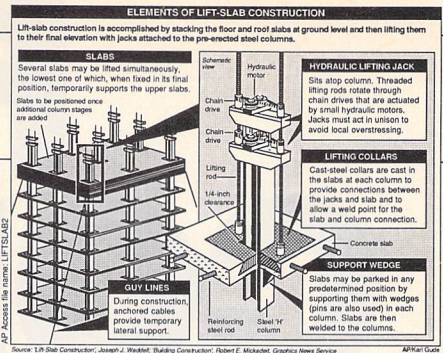
The new system uses conveyor belts to carry the bun and patty through the

broiler. After the patty falls onto the bottom half of a bun, a robotic arm places the other half of the bun on top.

At top speed the system can slap together about three burgers a minute. Unfortunately, a busy fast-food franchise might need as many as 15 sandwiches per minute at lunch time.

Worse yet, the system, as presently constructed, doesn't work well. In fact, when running at full speed, it manages to mess up its burgers an unacceptable 60 percent of the time.

A university spokesperson predicts that the system won't be perfected until 1990.



Computer Graphics Worth a Million Words

When a building recently collapsed in Bridgeport, Conn., a photographer's camera and a reporter's words couldn't tell the whole story. When news of the collapse first reached the Associated Press offices in New Jersey, a graphic artist was dispatched to the scene.

Sitting on the sidewalk across from the building, the artist powered up his Apple Macintosh and set to work depicting the event. His line drawing completed, he raced back to the AP offices and transmitted the drawing to member newspapers around the country. The incident marked one of the first times graphic artwork could be transmitted instantly over a communications network.

The new link, created by Solutions International Inc., a Montpelier, Vt., software development firm specializing in Macintosh software, is called GraphicsNet and permits the transmission of Macintosh graphics by AP artists via satellite at 9600 baud. A typical graphic now takes less than 10 seconds for end-to-end transmission instead of nine minutes on the AP LaserPhoto network.

The graphic artwork is received by the member newspapers' Macintosh computers in "background"—the graphic is received by a Macintosh and automatically stored on disk, while another application, such as word processing, continues to run uninterrupted at normal speed. The only indication the graphic is being received is a beep alerting the computer operator to the impending arrival of artwork.

Future plans call for scanned images of political cartoons and transmission of other non-AP graphic art.

For information, contact Solutions International Inc., P.O. Box 989, Montpelier, VT 05602; 802/229-0368. For more information on products from Solutions International, access CompuServe's Software Exchange (GO SOFTX) and select the "Search by" option. Select "Computer model" and then "Apple Macintosh."

—Cathryn Conroy

Casinos Place Bets on Computer Education

Most people associate Atlantic City with slot machines, a boardwalk and the annual Miss America pageant. But contrary to popular perception, people actually do live in the popular New Jersey gambling capital.

Perhaps it is only natural that when the Atlantic City school system needed a computer laboratory, the town officials visited a casino to get the necessary funds.

No, they didn't wager taxpayers' dollars at the roulette or blackjack tables. Instead, they asked Bally's Park

Place Casino Hotel for a donation. The wagering palace obliged the city with a \$23,000 grant.

"Our policy is that you must be a good corporate citizen," says spokesman Alan Rosenzweig. "Atlantic City gets 30 million visitors each year, but we who work here have to go home every night and live in these communities that need our help."

Incidentally, this isn't the first time an Atlantic City casino has made a computer contribution. Earlier this year, several casino owners refurbished the local United Way's office, supplying the charity with a personal computer, printer and other equipment.

Search Firm Finds Best Business Programs

Finding the right business software for specialized purposes—a program designed for billing in a dentist's office, for example—can be a lot of work. This task has been a little easier since the debut of **SOFTWHERE?**, a Yuba City, Calif.-based software search firm that specializes in locating software to match unique user requirements.

SOFTWHERE? does not sell software packages nor does it endorse any particular program or manufacturer; rather, it serves as an information resource. Using printed directories and online databases, the firm collects details on thousands of commercial and public-domain software packages. Clients are provided with such information as the supplier, contact, address, description of the package, how long it has been in existence, the number of users, hardware requirements and reviews of the program.

For each inquiry—which costs \$55—clients are usually given the names of three or four packages plus an evaluation checklist. "They can talk to suppliers and compare apples to apples," says Deepak Puri, marketing manager.

SOFTWHERE? boasts a variety of clients from small businesses to large corporations. The firm also works with several associations, including the American Bar Association.

For information and a free copy of the booklet "Guide for Selecting Computer Software," contact **SOFTWHERE?**, P.O. Box 3336, Yuba City, CA 95992; 916/674-3688.

—Cathryn Conroy

Fiber Optics Delivers Versatile Transmissions

Fiber optic technology plays a major role in delivering long-distance data signals. Now a new report indicates that fiber optics will soon have a significant impact on short-distance data transmission as well.

Fiber optic technology is set to exert a major impact on local-area networks, the systems businesses use to interconnect personal computers and peripherals, according to Market Intelligence Research Co., a Mountain View, Calif.-based market research firm. In a report, titled *Electrical vs. Optical Fiber Media: Focus on Local Area Networks*, MIRC claims that future LANs will be hybrid networks that include different technologies and mediums such as fiber optic cables. Each technology and medium should identify its appropriate niche, without competition among technologies, according to the company.

MIRC notes that fiber optics "is becoming the major technology in local and long-haul telecommunications and data communications network design, system implementation and networking applications."

For more details on the report, contact Market Intelligence Research Co., 2525 Charleston Rd., Mountain View, CA 94043; 415/961-9000.

For more information on LANs, visit the Telecommunications Forum (GO TELECOM) or the IBM Communications Forum (GO IBMCOM) on CompuServe.

—John Edwards

INVEST BY COMPUTER

Central Asset Account National Network FREE On-Line Access

Harness your computer's power with UNISAVE

- Deep Discount Brokerage Rates
- Money Market Sweep Account
- Unlimited Check Writing
- Portfolio Accounting
- Open with only \$1,000

Many FREE Computer Services
FREE Access to View Account
FREE Access to View Positions
FREE Entry of Brokerage Orders
NO Application Fee
NO Minimum Monthly Charge
NO Software Purchase Required
On-Line Investment Research

Data for over 40,000 securities
Quotes - Stock Performance Ratings
Research Fees based on connect time

Discount Stock Commissions

Up to 240 Shares.....	\$30.00
241 to 799 Shares.....	12 1/2¢ per sh
800 to 1099 Shares.....	10¢ per sh
1100 to 2099 Shares.....	8¢ per sh
2100 to 3099 Shares.....	7¢ per sh
3100 Shares or More	5¢ per sh

**GO-UMC or Call
800-UMC-SAVE**

UnifED MANAGEMENT

429 N. Pennsylvania Street
Indianapolis, Indiana 46204-1897

One of the MONY Financial Services Companies
MEMBER: Midwest Stock Exchange, NASD, SIPC

GO OLI or circle 8 on the Reader Service Form.

Languages Translate into Productivity

Fourth generation languages are only beginning to make an impact on the microcomputer community, but a new study shows that these products have already captured the allegiance of minicomputer and mainframe software developers.

The Data Processing Management Association, a Park Ridge, Ill.-based organization of computer and information managers, recently surveyed its members on fourth generation languages. According to the study, 51.8 percent of the responding firms use a 4GL (with more than 35 different 4GLs being used) and many of the companies indicate that they use more than one. Several respondents report plans to acquire a 4GL in the future.

Nearly 60 percent of those surveyed

report COBOL as their primary language. However, a number of respondents report using a 4GL as a secondary language.

Those with 4GLs were asked by the DPMA to indicate the overall importance the product has in relation to their application development productivity, information centers and end-user computing. Of those responding, 24 percent say they have a 4GL and end-user computing, 20 percent report a 4GL and an information center, and only 11 percent report having all three.

More details on the study are available from the Data Processing Management Association, 505 Busse Hwy., Park Ridge, IL 60068; 312/825-8124.

You can learn more about 4GLs by visiting the Programmers' Forum (GO PROGFORUM) or the *Computer Language Forum* (GO CLM) on CompuServe.

Database Services Entering Period of 'Extraordinary Growth,' Study Says

The growth of the online database services industry has been steady during this decade. The number of CompuServe subscribers is now in the hundreds of thousands while numerous other systems—both large and small—have sprung up.

In fact, the industry is moving into a period of "extraordinary growth potential," according to International Resource Development, a Connecticut-based market research and consulting firm.

"The largest area of growth will be in marketing," says Kenneth G. Bosomworth, a member of the IRD research team. While databases have long been used for list generation, demographic and other marketing purposes, additional valuable capabilities are only beginning to be realized.

For instance, when a consumer fills out a coupon or dials an "800" number to place an order, the information can become part of a database used for a variety of marketing purposes.

"Databases have traditionally *provided* data, but this new application means its function is changing. Now databases are being used to *gather* data," says Bosomworth.

Such technological advances raise the issue of personal privacy rights. While lawmakers consider legislation that would provide privacy protection to the individual in the collection of

data, marketing trade associations are doing their best to vigorously oppose any formal restraints, claiming that the industry will be able to regulate itself to the satisfaction of all concerned.

Bosomworth maintains that there is no violation of privacy when databases are used to gather personal information. In fact, he notes that this is already being done to some extent in the mail-order catalog business. "If you order an item from L.L. Bean, soon you will receive catalogs from other places, since L.L. Bean will sell or rent its mailing list. I don't see the development of these databases as a serious invasion of privacy."

But in true American business fashion, at least one company has turned the privacy concern into a lucrative moneymaker. Credit vendor TRW recently launched a customer service known as TRW Credentials. Among other features, the service alerts consumers every time their credit file has been requested.

"The irony in this service is that TRW can use the data on Credential customer requests and resell it to marketing people," quips Bosomworth.

For information, contact International Resource Development Inc., 21 Locust Ave., Suite 1C, New Canaan, CT 06840; 203/966-2525.

—Cathryn Conroy



Laser Disc Preserves Pieces of Heritage

State-of-the-art laser-disc technology is helping to save some of the earliest examples of recorded information.

The Library of Congress has placed its complete collection of spoken word material recorded before 1910 on a single laser disc. While that accomplishment alone is impressive, the library discovered—much to its surprise—that there was enough room left on the disc to include a series of political speeches from 1920.

The seven-inch disc, which cost \$30,000 to develop, contains 33 hours of minstrel songs, humorous monologues and vaudeville skits. The speeches include addresses by Franklin D. Roosevelt, Warren G. Harding, Calvin Coolidge and Buffalo Bill.

The idea behind the disc is to preserve the recordings and provide a more convenient retrieval tool for researchers, according to Sam Brylawski, a reference librarian in the library's Recorded Sound Reference Center.

To access the information contained on the disc, which is slightly larger than a conventional compact disc, the researcher uses a workstation that includes a videodisc recorder, a computer terminal and a decoder. A researcher places the disc in the recorder, calls up a catalog listing selections by title, author, subject, performer, genre and record label, and selects the material.

"It compresses a process that used to take about one and a half hours into a few seconds," says Craig D'Ooge, a library spokesman. "It is a powerful research tool, something that will become more common in the future for all types of recorded material."

—John Edwards

Save Time by Shopping Online

One of the first things I ever heard about computer communications was that someday people would be able to shop by using personal computers connected to centrally located "catalog computers," which would display information about available items, take orders and make sure the items were delivered to the customer's doorstep.

When I heard that, I saw it as one of the most practical applications for people like me who have trouble buying things in mall stores.

That doesn't mean I don't go to the local mall. I go there often. But I am a browser and usually can't make up my mind about what I should buy until two or three days after I see it.

That is why CompuServe's Electronic Mall is one of the handiest tools I have to save time and money when I am involved in serious shopping. There are many ways to use The Electronic Mall. You might use it, as I do, to search for items you have already seen and want to order without delay. Others may use The Electronic Mall to browse as one might browse through a catalog. Still others might use it to do comparison shopping from the comfort of their homes or offices.

One of the best ways to use The Mall is during the last frantic days of the holiday season when you've forgotten to get a gift for a friend or an important client. Many of the mall merchants will ship gifts directly to the person for whom it is intended. And because the order can be placed 24 hours a day, seven days a week, it can get to the recipient quickly.

By typing GO MALL at any system prompt, you'll be taken to The Electronic Mall main menu. The Mall has no membership fees or surcharges. All you pay is the normal connect-time and communication surcharges, if any, while using The Electronic Mall.

From the main Mall menu, you can see a rundown of what the merchants offer by product areas or departments. The "Shop by Merchant option" displays a numbered, alphabetical list of the merchants in The Electronic Mall. Select the number of the merchant you want to visit, and you'll be taken to the desired "store."

Another way to see what products or merchants The Mall offers is to use the FIND command at any system prompt. For example, if you want to see which Mall merchants sell flowers,

type FIND FLOWERS and the index associated with the FIND command lists merchants selling flowers through The Electronic Mall.

Each store in The Electronic Mall has its own menu. While the menus may differ from merchant to merchant, most of them offer similar capabilities.

Usually, the merchant offers some sort of online catalog containing complete descriptions and prices of all items offered for sale.



Many of the stores let you leave a message for the merchant from the store's menu. For example, if you want to know more about a product before purchasing it, you can leave a message with a specific question.

Many of the merchants also give you the opportunity to order a print catalog while online. In many instances, ordering the print catalog is as simple as typing your name and address.

New users may be hesitant about ordering from The Electronic Mall for fear they might accidentally order something they don't want. The ordering system is constructed with those fears in mind and provides ways at every stage of the process to change your mind or terminate the ordering process.

Ordering is the same in every store, but the payment and delivery options may vary from store to store. In each store, there is an option on the main

menu outlining the ordering procedure. Read this "How to Order" section before ordering from a specific merchant.

When you've located the item you want to order, type the letter O at the end of the item's description. If you type the O on a menu listing products, you will be prompted for the menu number of the item you want to order.

In either case, the item you have chosen will be stored in a personal file until you want to leave that merchant's store. If, after ordering an item, you want to continue browsing, type an R. If you are finished shopping in the store, type CHECKOUT and an electronic order form will appear.

Even after the final order form appears, you can cancel an order at any time by typing EXIT at any prompt on the order form.

Once you've finished an order, you'll be shown a summary. At that point, you can change any or all of the order. When you confirm that the order is correct, you'll receive a confirmation number, which can be used to inquire about an order at a later time or date. All merchants list addresses and phone numbers. Many of them have feedback sections where you can check online about the order. Others offer toll-free numbers.

Finally if you have to contact the merchant about an order and still feel you need help, go to the main Electronic Mall menu and choose the option to send a message to the Mall Manager.

CompuServe's Electronic Mall continues to grow. New merchants are added often and with them come products and services that are as close as the keyboard of your own computer.

David Peyton co-authored How to Get the Most Out of CompuServe and CompuServe for IBM PC Power Users. His CompuServe User ID number is 76703.244.

PSSST!

Get behind the scenes with Monitor's "Behind the Screens" section on *Online Today Electronic Edition*. Find out what's really going on. Type GO OLT-130 from any prompt on the CompuServe Information Service.

ONLINE
T O D A Y

Something about the end of one year and the start of the next inspires us to focus on personal goals—anything from quitting smoking to pursuing a graduate degree. Some of us even put these “resolutions” down on paper.

Although we may have the best of intentions, it's not always easy to make a lifestyle change. We may lack the informational resources to get started or the ongoing support—from others with the same goal—to keep at it.

Online services can bypass these obstacles, making goals seem a bit more reachable. In addition to locating information electronically, people with similar interests and goals can link up and cheer each other onward.

In the following pages we've provided a starting point—a series of articles to give you ideas on how to use online services for self-improvement. Why not make 1988 your year of...

GREAT BEGINNINGS





Get Away from It All

Tired of the same old routine? How about a few days off and a change of scenery? Maybe a weekend in the country or a trip into the big city?

Taking off for a weekend adventure might be fun if you only knew where to go and what to do. Many people spend years living in the same place with no idea of the exciting activities in their own areas. In most cases, interesting experiences can be found within a few hours' drive of home.

With the wealth of vacation and travel information online, almost anyone can find new amusements. Depending on where you live, you can investigate get-away weekends, hotels, rental cars, state parks and campgrounds, sights or entertainment.

Sun 'N Sand (GO SNS) has hotel and travel package information for Arkansas, Alabama, California, Florida, Georgia, Hawaii, Indiana, Louisiana, Nevada, North Carolina, South Carolina and Texas. Sun 'N Sand also has information on cruise ship fares and schedules. You can book trips with Sears Travel.

For those who plan to be in Florida or who already live there, Discover Orlando (GO ORLANDO) has a wealth of information on the sights and accommodations there. Tourist attractions are

listed by location (east coast, central or west coast). In addition to landlocked attractions, you can find out about SeaEscape Cruises. These one- or two-day excursions into the Atlantic feature on-board casinos, entertainment, swimming pools and deck sports.

Some popular but lesser-known Florida attractions include Church Street Station, Gatorland Zoo, Homosassa Springs, Leu Gardens, Orlando Science Center, Orange County Historical Museum, Fort Christmas and the Bok Tower Gardens.

Sun 'N Sand and Discover Orlando trips booked through Sears Travel can be charged to a variety of credit cards.

For those out west, Rocky Mountain Connections (GO ROCKIES) has information on attractions in Colorado, Idaho, Montana, Nevada, Utah and Wyoming. You'll find the details on ski resorts, state parks and recreation areas, dining and entertainment, tour guides and hotels. Many ski resorts are open year-round and offer summer activities such as horseback riding and camping.

Both West Coast Travel (GO WESTCOAST) and Adventures in Travel (GO AIT) feature in-depth articles about noteworthy attractions. West Coast Travel has articles grouped by states: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana,

Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, plus Canada and Mexico. Typical articles include "Five Good Half-Day Trips from San Francisco," "Backpacking the Wilderness," "Guest Ranches in the West" and "Tucson: Portrait of a Southwest City."

Adventures in Travel also offers articles on similar topics. For instance, "Minnesota's Gull Lake Resort Country: Pleasures of the Grand View Lodge" was recently added. Articles on other attractions in places such as Minnesota, Michigan, Canada, Mexico, Texas, and New York outline exciting activities that might not occur to the average traveler. For a quick pick-me-up, nothing beats trying a truly unique experience, such as jet boating down Idaho's Hell's Canyon.

The ABC Worldwide Hotel Guide (GO ABC) can help you find a hotel for your destination. The phone numbers provided with each indexed hotel can be used to place your reservation, and the listing includes the credit cards you may use to hold your reservation.

Even a last-minute trip becomes a breeze with only a little online research. So what are you waiting for? Get out that rainy-day money, hop in the car and head for a "revitalization excursion."

—Cheryl Peterson

Pick Up Good Reads for the Winter

As winter approaches, you may start looking through your book collection on the shelves, or in the bottom of your closet, under the sofa—*anywhere*—in search of a “good read” for a chilly evening spent indoors. You might think of going out to the library to look for books at random. Still, you remember those times when you trudged home with five heavy books only to have four losers and one passable read. Well, CompuServe can help.

Lovers of literature will find that CompuServe’s Literary Forum (GO LITFORUM) can serve as a browsing room and a ready reference source, covering everything from literature and writing to stage, screen and comics. In the forum, you can leave a message telling about yourself and the kinds of books you like to read. Says Forum Administrator Alex

Krislov, “Responses to your message will usually appear within 24 hours,” making the forum a good place to find people with similar interests in literature. From them, you can obtain recommendations on “good reads” for the winter. Or you can browse the message board for ideas.

In addition to finding books for yourself, you may be interested in giving books as gifts. Each year the Literary Forum has an online discussion of holiday books that make ideal gifts for hard-to-buy-for relatives. There’s also a punchy and popular “worst books of the year” discussion—you can learn what not to buy or harangue the losers you’ve read, warning other unsuspecting souls. The forum also has a “year’s best” discussion. Check the forum’s conference bulletins for more details.

For more ideas, you may want to drop in on the Literary

Speed up Letters with Electronic Mail

Renewing old friendships and developing professional acquaintances as well expediting your business correspondence is simple, fast and economical using EasyPlex. Formal letters—the old-fashioned kind sent by mail—never seem to get written, but sending a few lines or paragraphs electronically takes just minutes.

The potential uses of EasyPlex are nearly limitless. Associations and other organizations regularly contact their members through EasyPlex newsletters, sales representatives can follow up with prospective clients, colleagues across the country can be kept updated on fast-breaking developments and business travelers can keep in touch with the home office anytime day or night.

To send an EasyPlex message, you must have the recipient’s User ID number. A relatively new area on CompuServe called the Subscriber Directory can help you find that number quickly. The directory (GO DIRECTORY) is much like a city telephone book in that it contains the name, User ID number, city and state of all CompuServe subscribers, unless they have specifically requested not to be included. Accessing the directory is fast and easy; just follow the menu, and the system will prompt you for the name you are researching. The city and state can help narrow the search.

Once you have the recipient’s User ID number, the next step is to send the EasyPlex message. After typing GO EASY, a menu will guide you through the necessary steps; expert users can bypass the menu for online time (and money) savings.

Special features of EasyPlex make

this electronic mail system ideal for business users. For instance, a Telex link enables subscribers to transmit a message electronically to any of the more than 1.5 million Telex terminals in the world. Telexes sent to destinations within the continental United States cost 60 cents per 300 characters, while the cost of those sent to foreign countries is determined by regulatory agencies within each nation. In addition to this surcharge, you are billed for connect time charges and communications surcharges.

If you want to know when the recipient of your EasyPlex reads the letter, simply send the message with a Receipt Request. To do this, select the SEND WITH /RECEIPT (\$) (Option 5 on the EasyPlex menu) or type /SEN/REC in place of /EXIT after you have composed or uploaded the message. The (\$) sign means there is a surcharge for this feature, which in this case is 25 cents.

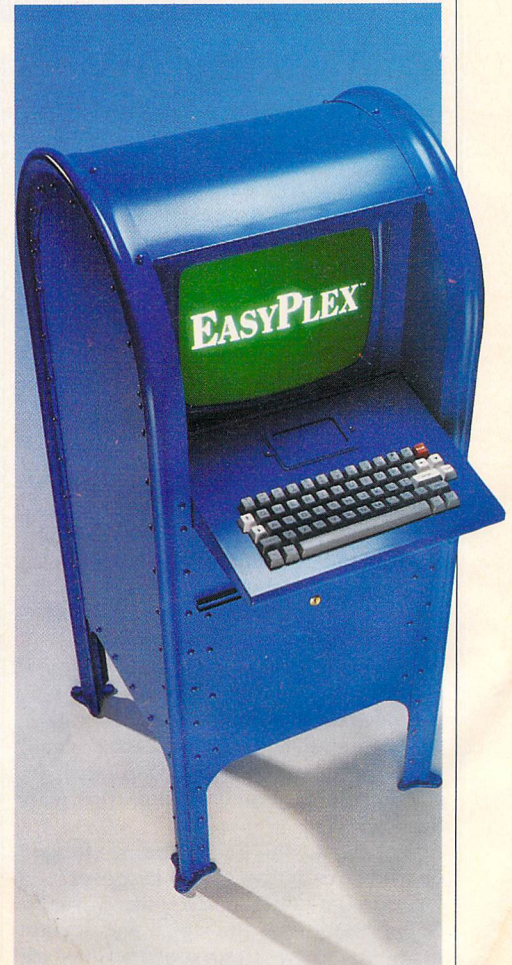
Every subscriber can keep an EasyPlex Address Book online listing the names and User ID numbers of those individuals to whom mail is sent. The Address Book can be updated or changed at any time and is easily accessed from the EasyPlex Main Menu. Once a name is listed in the Address Book, you simply need to type in the recipient’s name when sending a message; the system will automatically add the User ID number so you don’t have to remember a long string of numbers.

EasyPlex messages can also be sent to MCI Mail. To do this, type)MCIMAIL:XXX-XXXX at the “Send To” prompt. (XXX-XXXX is the format of MCI Mail’s User ID numbers.) MCI Mail subscribers can send messages to EasyPlex. MCI Mail User ID numbers can also be stored in your Address Book, but they must be entered as)MCIMAIL:XXX-XXXX.

There are surcharges for sending an EasyPlex message via MCI Mail that are determined by the length of the message.

EasyPlex is simple, fast and inexpensive to use. Experiment with this electronic mail system and before long you’ll be an avid user, too.

—Cathryn Conroy



Forum's weekly conferences on Tuesdays at 10 p.m. EST. Forum members can listen and comment on literary topics. This is another likely spot to collect recommendations for "good reads." When conference members respond to each other's questions, it leads to lively discussions and immediate suggestions.

If you want to bypass the personal advice approach to finding books, you can effectively "go to the library" online. The Literary Forum has book reviews on file, accessible by keywords, in its data libraries. In addition, many forum members upload their own literary creations, including most of the popular genres, into data library files for others to read or download.

Once you decide on a book, you can use the Literary Forum's bookstore file to find out the best place to buy the



book. At the forum function prompt, type DL3 (to access Data Library 3) and then type R STORES (to request the file about bookstores). This file has recommendations from all over the country, so you can find that special bookstore even when you're away from home.

—Paul Newkirk

Hit the Slopes

Are you tired of skiing the same old slopes, but don't know where to find out more about the alternatives? Never been skiing but anxious to try? Want to know more about what's available?

Answers to these and many other questions are at your fingertips. For planning a quick ski trip, almost everything you need to know can be found on CompuServe.

Rocky Mountain Connections (GO ROCKIES) and West Coast Travel (GO WESTCOAST) offer extensive information on the ski resorts out west. West Coast Travel has articles about prominent ski areas, including details on how to get there, and prices for accommodations, lessons and lift tickets. The articles also feature other activities in the area for after-ski fun. To find West Coast Travel's ski information, select "Special Interest Travel" from the West Coast Travel menu and choose "Skiing the West." At press time, there were eight reports online.

Rocky Mountain Connections offers tourist information (including attractions, skiing activities, accommodations, dining and entertainment and recreation areas) for Colorado, Idaho, Montana, Nevada, Utah and Wyoming. Special listings detail what is available for different types of skiers, including Alpine, Nordic, cross-country and helicopter skiing. Montana has "ski and soak" resorts featuring snow and hot springs.

Detailed information about each major resort is available. These reports include the location, season start and end dates, type of trails and facilities, ski schools, equipment rentals, lodging, dining and other information. Rocky Mountain Connections also lists by state the snow depth at each of the resorts.

Travelshopper has snow depth reports listed under its "Nice to Know" menu. Type GO PARS, select Option 5 to access Travelshopper and then select "Nice to Know." Choose Option 9 for US ski areas or Option 10 for international ski areas. You can check the weather by typing GO WEA.

While Rocky Mountain Connections offers a mountain of information online, you can also order brochures for the ski destinations or use the reservation services to help plan your trip. Select "Reservation Services" from the main menu and let Rocky Mountain Connections help you reserve a rental car and recommend tour packages.

Once you've decided which resort suits your style, you can use several methods to find a plane flight if you need one. Travelshopper, the Official Airline Guide Electronic Edition and Eeasy Sabre all have flight information.

If you want to guarantee that a room will be reserved for you, head to the ABC Worldwide Hotel Guide (GO ABC). Type in the state and city name for your ski destination and ABC will create a list of the hotels there. You can narrow the number of hotels according to price range, exact hotel name if you know it, hotel chain or location/amenities. When you choose "Display hotel list," a list of hotel names and their locations will be shown. If none of those appeals to you, press the Return key and view the remaining list of hotels.

If you want more details, choose the number of the hotel you're interested in. The listing includes the name, address, phone number, number of rooms, room rates, accepted credit cards and amenities (i.e., room service hours, valet/laundry

services, sports/leisure facilities). If you need more information or want to place a reservation, call the phone number listed.

Now all you need for the perfect ski getaway are skis and an amiable companion.

—Cheryl Peterson



Photographic Illustrators/Tom Hogan

Get Game Pointers from Expert Players

Did you ever think you could be a better chess player if you could just see how others did it? Ever wish it were a little easier to find your way around the dungeon or countryside of your favorite game? Or wish you could find a way to play bridge more often so you could improve your skills?

The Gamers' Forum on CompuServe, dedicated to online discussion and support of all types of games, is your answer.

The forum offers a Sunday night bridge game in your own home without worrying about fixing snacks for the whole gang. Ray Moulden hosts the 8:30 p.m. EST bridge-fest in room 12 of the conference area. "Before players join in we ask that they read the BRIDGE.GAM file in Data Library 12 just so they know how we conduct the games," he says. Another file that will help newcomers get into the games is BRDG80.DIA, which generates a blank form designed to make following the online games easier.

Beginning bridge players may want to download the five bridge lesson transcripts in Data Library 12. With the accompanying quizzes, they help new players pick up the game more quickly.

For those who enjoy chess, there's help as well. One good way to improve your play is to study games of other players. The Gamers' Forum has a number of game transcripts filed in Data Library 4. EINOPP.GAM is a file containing the moves in a chess game between Albert Einstein and Robert

Oppenheimer. Some of the masters featured include Karpov, Kasparov and Sokolov. Forum members have held a tournament and a marathon, and the moves of these games also are available. Subtopic 4 in The Gamers' Forum also supports CompuServe's *Interactive Chess* game.

And just in case you don't have them handy, the rules of play for the US Chess Federation are available in Data Library 4.

Fantasy role-playing gamers will find a wealth of useful information, both in the Gamers' Forum data libraries and on its message board. The data libraries contain transcripts of conferences with role-playing game designers, editors and representatives from role-playing game magazines, and computerized role-playing game programmers. Some of the CO guests include Lord British and his staff (*Ultima I* through *IV*), the authors of the *Wizardry* series games, the authors of *Bard's Tale*, *Might and Magic* and *Alternate Reality: The City and The Dungeon*. Maps of the terrain

in some of these games also are filed in the data libraries. For the game masters, there are dungeon designing tools and dice-rolling simulations.

Subtopic 15 of the board is dedicated to a currently hot game. In December it will be *Ultima V*. Players can leave questions or requests for hints, and other players or the game's designer may offer help. A vendor support area is available for press releases, game information and conversations with game company representatives.

Further hints can be found in The Gamers' Forum's companion online magazine, *The Electronic Gamer* (GO TEG). Game reviews and walkthroughs can help with some of those stubborn problems. To view the walkthroughs, type GO TEG-10. To see the hints, GO TEG-20. The reviews are located at TEG-3215. *TEG's Gazette*, a sort of online gamers magazine, is at TEG-850. Game company newsletters are also available.

—Cheryl Peterson

You, Too, Can Have a Way with Words

If you'd like to develop a way with words, several games and tests on CompuServe can help you assess and improve your word-related skills.

Baffle Word Game (GO BAFFLE) tests your ability to form words from adjacent letters in an on-screen display. You have three minutes to find as many words as possible by combining letters that adjoin horizontally, vertically or diagonally. Points are awarded based on the length of the word, with one point awarded for a three-letter word and 11 points for a word of more than eight letters. You can play *Baffle*—suited for players ages eight and up—alone or against other players.

Word Scramble (GO SCRAMBLE) presents a scrambled word on the screen. Your goal is to unscramble it by guessing one letter at a time, by typing the whole word or by typing the remainder of the word. The game can be played by one or two players at the same terminal. Players scoring more than 200 points are eligible for the Hall of Fame. To measure your word-related IQ, take *The Multiple Choice IQ*

Test (GO TMC). The test has seven sections, several of which are word-related: Part five deals with analogies, part six analyzes your vocabulary ability, and part seven involves decoding a sentence.

Just for fun, access **Witty Write-Ins** (GO TMC, Option 1; adult games, Option 7). Choose from several story topics. Then, when your computer asks for a verb, noun, adjective or adverb, supply the necessary word. See how the words you have selected complete a pre-determined story—often for a humorous outcome.

Classic Quotes (GO TMC, Option 1; adult games, Option 8) can be played in two ways. You can complete the famous quotation. Or you can fill in the missing words in a quotation, then earn bonus points by naming the author.

Similarly, **Slogans for Sale** (GO SLOGANS) lets you test your recall of famous advertising slogans.

With this great variety in game offerings, word games on CompuServe should suit nearly any player who enjoys having the last word.

—Kathy Baird





Stop Smoking Program Extinguishes the Habit

It started with a kind of tingling sensation in his left shoulder and quickly progressed to an uncomfortable pressure. While considering which household task his muscles were rebelling against, a sudden crushing weight cramped his chest. Within seconds he was sweating profusely while gasping to catch his breath. He knew, as they say, that this was the beginning of the end. Without help, he could be dead in minutes. But this day, luck would be with him—his son would come through the front door in a few moments. Paramedics would be summoned and fate would be cheated. This time.

Think this won't happen to you? Guess again. I was a two-pack a day smoker when it happened to me. I quit cold turkey all by myself, but, then, I was motivated. Really motivated.

I was lucky, too. While I didn't suffer a heart attack, my medical emergency was the result of a cigarette habit that ended when I found myself hooked to IVs, scanners and heart monitors. There is an easier way to quit, and you don't have to take a trip in an ambulance to find it. It is called the Stop Smoking System, and it is available as part of CompuServe's Health Forum (GO GOODHEALTH).

The Stop Smoking System (GO

NOSMOKE) is run by Sid J. Schneider, M.D., president of Behavioral Health Systems Inc. and a psychologist with a background in computer systems. The system is funded by a grant from the National Institutes of Health, and there is no surcharge for participating.

Preliminary figures indicate that the system is at least as effective as some expensive clinics. According to Schneider, "Of the approximately 50 million smokers in the United States, statistics indicate that 90 percent wish they did not smoke. Despite that, the majority of smokers are unable to quit on their own and less than 3 percent ever seek professional help to do so."

Schneider points out that attempts have been made to bring treatment to smokers instead of the other way around. A number of stop smoking programs have been presented on television and in newspapers. Unfortunately, many smokers lose motivation with programs that don't provide individualized help.

The computerized Stop Smoking System on CompuServe is designed to help smokers who want to quit smoking in a month. The system is unique because it simulates the interaction between a smoker and a trained counselor. No participant receives exactly the same program.

Preliminary figures from 1,100 smokers who have enrolled in the program

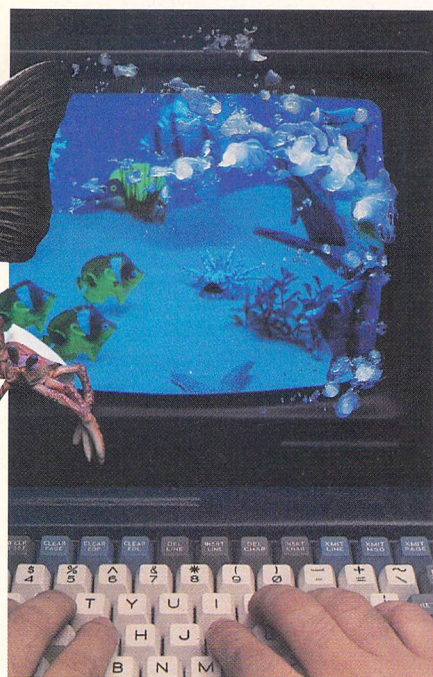
indicate that the success rate is at least double that of other methods.

Patrick Boyle quit three weeks after he started the program. "I've been off cigarettes for almost three months," he says. "I used to feel terrible and was always coughing. Now I think of myself as a non-smoker, and I give the program four stars. I feel cleaner and healthier, and have saved myself about \$25 a week."

If you need more time, the system will adjust to your needs. Phil Fisher has used the system for about a month and has cut in half the number of cigarettes he smokes. "The Stop Smoking System has given me ideas about what to do when the urge to smoke hits and made me realize why I smoke and how much I actually smoke," Fisher says. "My quit date has been adjusted for a week, and this time I hope to quit for good."

How much time you spend using the Stop Smoking System and the Health Forum support group depends on your individual needs. You can stop smoking with just a few hours of connect time. But no matter how much connect time you use, it will probably be cheaper than the alternative methods or the potential health risk.

—James Moran



Find Helpful Hints from Fellow Hobbyists

Earlier this year, a New York City woman decided she wanted to start collecting wine. But the only spot in her cramped apartment where there was room for wine racks was near the piano. Would the vibrations harm the wine?

Meanwhile, a man in Virginia Beach began getting involved in the local opera association and developing an intense interest in classical music. Then he ran up against a wall when he couldn't find a copy of a particular book about Johann Sebastian Bach anywhere in his area.

In Boston, a new comics collector discovered that she had a complete collection of Marvel's New Mutants line—except for issue number 3.

And a New York would-be backpacker found himself frustrated by his lack of knowledge over whether a particular reasonably priced water filter was adequate for camping in the Northeast, or whether he needed to buy something more heavy-duty.

What all of these people did was to take their questions to CompuServe's hobby forums. The wine collector visited the Bacchus Wine Forum (GO WINEFORUM), where more experienced collectors explained that the piano probably wouldn't cause any damage, but the heat in a city apartment might. They gave her the names of some temperature-controlled storage

units, and invited her to the regular online "tastings" presented by the forum for connoisseurs and new vintage members alike.

The music lover headed for the Music Forum (GO MUSICFORUM), where he got a list of bookstores in New York and England that specialize in second-hand and out-of-print books—and even the name of the firm that was likely to have published the original German version of the book he sought.

Someone on the Comic Book/Animation Forum (GO COMICS) just happened to have a New Mutants number 3, and gave it to the woman from Boston. She also got advice on just how much her comics might be worth, and tips on what other books were likely to become hot collectors' items.

And the backpacker was deluged with testimonials from members of the Outdoor Forum (GO OUTDOORFORUM) about the water filter equipment in question. (As one member wrote, tongue in cheek, "Seriously, I think it's more than adequate...unless you're camping along New York harbor.")

There is usually a good mix of casual enthusiasts and experts online in the hobby forums. Both welcome and assist beginners. The atmosphere tends to be informal—as in the Photography Forum (GO PHOTOFORUM), where the log-on message cheerfully explains that "it's sort of like visiting your neighborhood camera store, except we won't try to sell you a gold-plated Leica." According to Assistant Forum Administrator Jon Jacobs, the membership is "about half amateurs and half professionals, and everybody gets along fine."

Most forums have special subtopic boards and data libraries set up specifically to help newcomers get started—such as the Novice Section of the Photography Forum and the Beginners Corner in the Aquaria/Fish Forum (GO FISHNET). The Fish Forum also offers a series of uploaded lectures, such as the recent one on the chemistry of aquariums, which even included instructions for a home lab session.

Whatever your interest—model railroading, ham radio, science fiction, sailing, scuba diving, astronomy and more—you're likely to find online mentors and mavens to help you pursue it. Just type GO HOBBIES or GO FORUMS for a list.

—Lindsay Van Gelder

Be Ready for the Return of Tax Season

If income tax is on your mind as the close of the year approaches, you may want to check into online services that can help you prepare for tax season.

For an itemized list of 38 major tax changes under the new tax law, for example, refer to H&R Block (GO HRB). There you'll find information on tax preparation courses and free tax recordkeeping books.

Several forums offer tax-related information and software in their data libraries. Using "tax" as the keyword, browse through the financial data files in the Working from Home Forum (GO WORK), the International Entrepreneurs' Network (GO USEN) and the Investors' Forum (GO INVFORUM).

In the Working from Home Forum, you'll find:

- A program for IBM compatibles that automatically produces logs of computer usage as required by the new tax laws
- Commodore 128 software that accurately runs calculations for the new W-4 Form
- Information on how the deduction of your personal computer is related to the home office deduction
- Information on how tax reform affects home-based businesspeople and telecommuters

In the International Entrepreneurs' Network, you'll find:

- An article on how tax reform affects home-based businesses
- A list highlighting changes in the tax reform act of 1986 by comparing the new law to the old
- A chart comparing the old law to the new

Information in the Investors' Forum includes:

- A description of changes affecting 401(K) plans
- A file detailing the effect of the tax act on IRAs, including a quick test to determine the deductibility of your contributions
- A Lotus 1-2-3 template containing various tax forms and schedules
- A Lotus 1-2-3 template for estimating taxes under the new law for the 1986 through 1989 calendar years

Using CompuServe as a major tax-planning tool can help you file a more accurate return while saving time and money.

—Kathy Baird

Use Leading Edge Tools to Continue Learning

When Chris Bigenho began work in the summer of 1986 on his senior thesis, he quickly discovered that traditional library research would be insufficient. Majoring in environmental studies at the University of California at Santa Barbara, Bigenho wanted to research the biological and political implications of the reintroduction of the wolf to Yellowstone Park, a topic of much current debate.

The library provided information on the biological aspect; however, most of the books were published in the late 1960s or early 1970s. The raging political debate, centered in Washington, D.C., required current information that wasn't available through traditional resources.

Bigenho's mother, Caryl, had a solution: setting up a special clipping file on CompuServe's Executive News Service. ENS monitored the thousands of stories that crossed the newswires daily and clipped just those stories containing the keywords she specified.

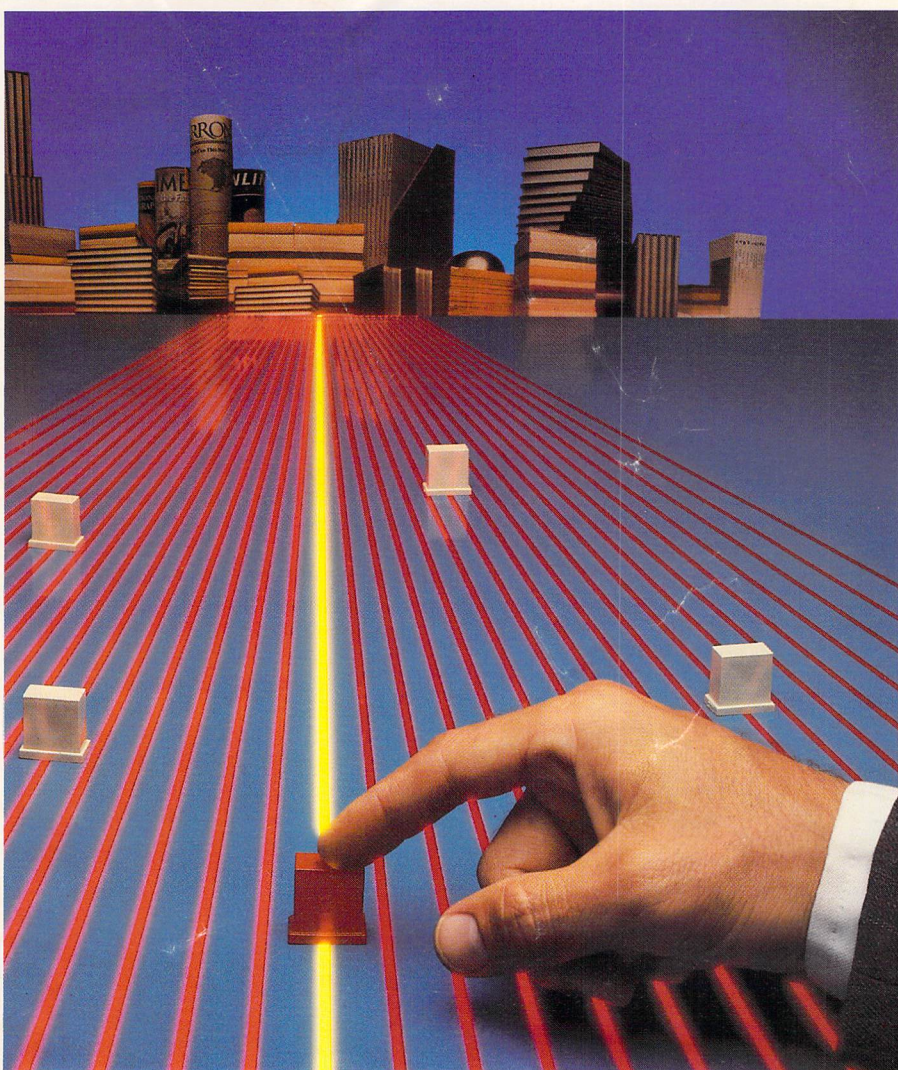
The file was used by Chris—when he went home to do his laundry—for 11 months.

"The information I was getting from CompuServe was current and direct. I organized my print-outs by date, and by the end of the school year, I had my own little book on the topic and it was much more current than anything in the university library," says Chris.

The Executive News Service (GO ENS) is an ideal way to research current events and make sure that nothing slips by unnoticed. When you set up a "clipping folder" of your special interests, articles from major newspapers and wires will automatically be collected for you. Selecting the appropriate keywords is all you have to do; ENS does the rest. To set up a folder, just follow the menu instructions.

Another excellent service for students is IQuest, a gateway to more than 800 independent databases ranging from accounting to political information. In many ways, it is the most sophisticated service on CompuServe, but it remains easy to use through well-organized menus and a special SOS system that allows personal, one-on-one online assistance with an expert research librarian.

IQuest is best used by someone who is interested in researching a specific topic. By typing GO IQUEST, you'll actually be accessing other databases,



provided by such vendors as Dialog, BRS and NewsNet. It is ideal for students and researchers who want to further define a problem, conduct research or add to a bibliography. There is a surcharge, based not on connect time but rather on the number of searches you perform. IQuest will frequently display the charges as they accrue, so there are no surprises.

Two types of databases are available on IQuest: bibliographic and full text. Bibliographic databases provide complete reference information on an article, including title, author, publisher and date. Many databases even provide an abstract or summary of the article.

Full-text databases provide the entire text of articles, although these databases are necessarily narrower in scope than those offering only bibliographic citations.

There are two ways to search IQuest. IQuest-I guides you through a

series of menus defining your topic of interest. The system then determines which database is right for your search. The menus begin with general topics and then become more specific as you narrow your search.

The second method of searching, IQuest-II, is used when you know the name of the database you want to search. You type in the name of the database and can search with "Basic Searching" or "Field Searching."

The intricacies of using IQuest are fully explained in the introductory menu; first-time users should download, print and study this information before attempting a search.

Online services are an ideal way to continue your education—and impress your advisor with your extraordinary research.

—Cathryn Conroy



Speak Your Mind on the Issues

With 1988 will come a deluge of election information, for in November we will elect a new president and many new congressmen. CompuServe is offering subscribers a unique way to get involved with the election through Election '88 (GO USA), an online database that tackles the tough issues candidates. The database allows you to closely

follow the national candidates and issues, and to express your opinion in a way the candidates will hear.

Textfiles in Election '88 include election news supplied by the Associated Press and several other sources, platforms summarizing the positions of each party and the positions each candidate holds on the major issues, and a schedule listing where each candidate will be appearing.

The interactive features of this database include a question-and-answer section that allows you to receive answers to questions posed to candidates' campaign organizations. Electronic polls will be conducted regularly asking not only who you will vote for but also your opinion on the hot issues of the day. The results will be published online and will be one of the few places where candidates can receive opinions instantly and track the changing moods of the voters.

The database will feature regular online conferences for discussion of the candidates and issues. It is hoped that representatives from the various candidate organizations will be on hand to answer questions.

You don't have to be politically active or live in a major metropolitan area to get involved with current issues. Debating the pros and cons of such

topics as women's rights, peace, elections and ecology can be stimulating and fun. Debating them with a national audience can be exciting and challenging. The Issues Forum (GO ISSUES) offers this challenge any day or night of the week.

The forum exists for the free exchange of subscribers' thoughts. The old adage "Don't discuss religion or politics" definitely does not apply here. The more heated the discussion, the better.

With 17 subtopics, this forum is never at a loss for words. The topics are as varied as the people who congregate here, stirring up a hotbed of issues. The data library sections include peace and foreign policy, political issues, individualism, free-thought issues, men's and women's issues, parenting, handicapped issues, ethics and human rights, economic issues and more.

The conferencing area is usually busy in the Issues Forum, offering an opportunity for real-time exchange of ideas and opinions. Regular conferences are scheduled three to four days each week and cover paranormal issues, handicapped issues and special topics.

—Cathryn Conroy

Motivate Yourself to Achieve Goals

If you want to motivate yourself toward higher achievement—whether on the job or personally—order a motivational audio tape through CompuServe's Electronic Mall.

Waldenbooks (GO WB) offers motivational tapes for nearly any occasion: losing weight, stopping smoking, reducing stress, thinking more positively and improving human relations skills. Use your daily driving time more wisely by playing the right motivational tape as you commute to work. A few days of on-the-road listening will put you on the road to achievement.

If weight loss is your goal, you can select from several tapes, including *Slim Forever for Women*, *Slim Forever for Men*, *Lose Weight*, and *Maintaining the Rotation Diet*.

For the executive eagerly climbing the corporate ladder, the choices are also varied. Titles include *Secrets of Closing the Sale*, *A Passion for Excellence*, *The Secret to Staying Motivated*, *Top Performance*, *Mastering the Art of Selling*, *The One-Minute Manager* and *The One-Minute Sales Person*.

When improved human relations skills are the objective, choose *Coping with Difficult People* or *The Art of Influencing People*.

You can learn to decrease your stress with *Self-Learn to Relax*, *Master Self-Hypnosis*, *Relieve Stress and Anxiety*, *Stress-Free Forever for Men*, and *Stress-Free Forever for Women*. Or relax to the sounds of *Babbling Brook*, *Thunderstorm*, or *Ocean*.

When positive thinking is the goal, selections include *Be More Positive*, *Positive Imaging*, *How to be a No-Limit Person*, *Dr. Norman Vincent Peale's The Power of Positive Thinking*, and *Dr. Norman Vincent Peale's Power of the Plus Factor*. You may also want to try *Stop Smoking* and *Build Self-Confidence*.

Tapes range in cost from \$5.95 to \$14.95. The return on your investment could be a promotion, a healthier lifestyle and an improved outlook on life.

—Kathy Baird



Why Wait Any Longer? Gain Friends and Lose Pounds Online

Online communication has replaced Liz's (not her real name) desire to overeat. When she first subscribed to CompuServe a year ago, she was 30 pounds heavier. "I'd never had a weight problem until I turned 40," she says. A prescribed medication contributed to her weight gain.

"I had no idea how to eat properly—my nutritional habits were poor—and I neglected to exercise. The more I told myself I had to diet, the more frustrated I became and the more I ate."

Fortunately, she found a home online in the Health Forum (GO GOODHEALTH). "I could talk to others who understood: people who had a problem like mine, experts on nutrition, even doctors. They provided great moral support—like when I'd type that I wanted something fattening and they'd reply 'NO!'—and lots of solid information on proper foods and exercise." As a result, Liz has kept off her extra weight for more than six months. "Typing satisfies my food cravings," she says. "And I'm thinking of buying a stationary bicycle so I can trim down even more while I'm using the computer."

The Health Forum's Overeaters Anonymous support group has been highly successful for Liz and other subscribers, according to Forum Administrator Bob Walter. In addition to weekly meetings (Thursdays at 9:30 p.m. EST), the

forum has nightly conferences for dieters. Data libraries contain low-calorie menus and diet tips, along with the latest developments on nutrition and exercise.

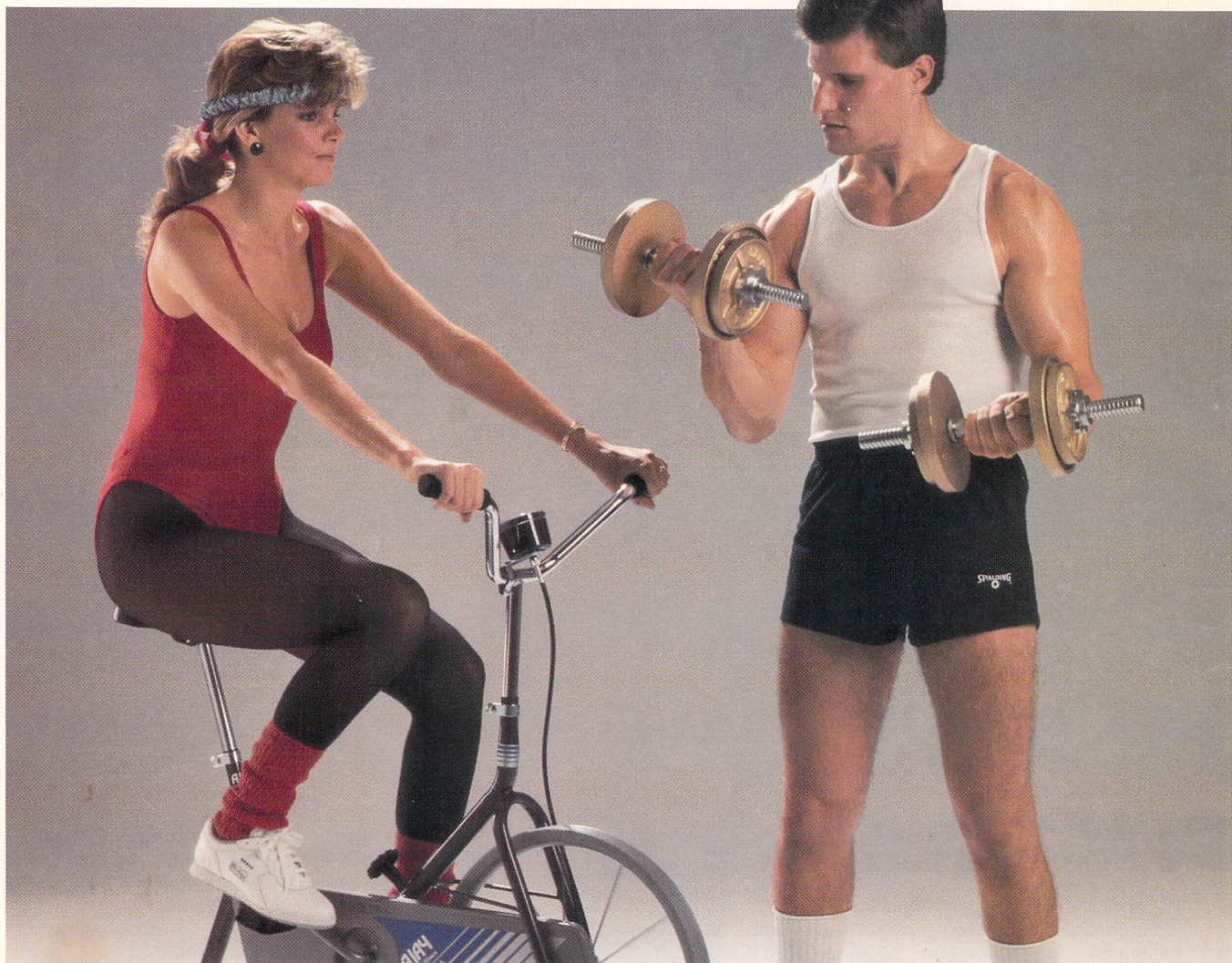
The "Weighty Matters" group on the Human Sexuality Forum (GO HSX) is another place to find friends and information. The forum started this group because each person's self-image affects his or her attitude about sexuality. Participants discuss their feelings about being overweight in a society obsessed with thinness, dealing with family and friends, and why they overeat. Topics cover stress, boredom and the issue of control. Both the Human Sexuality and Health Forums offer other online support groups for substance abuse and alcoholism.

"The forum is a non-threatening place to get assistance and find kindred souls," observes Walter, noting that he, too, has dropped several pounds since joining the Health Forum's OA chapter.

"The anonymity provided by the computer can bring out people who are self-conscious about facing a group or actually getting on the scale," says Liz. "Rather than feeling ashamed of themselves, which is destructive, they can ease into a discussion about their problems. Just talking about it helps."

"Like everything else, it is a matter of learning good habits," Liz says. So whether your goal is five pounds or 50, what do you have to lose by going to an online support group—except for that unwanted weight?

—Sandra Gurvis



Resolve to Get Fit

If this is the year you've resolved to get serious about fitness, don't head for the links or the Nautilus machine yet. Visits to HealthNet and the Health Forum can turn great expectations into great beginnings without a lot of false starts (GO HEALTH).

"Most fitness plans discuss the need for 'aerobic' exercise to speed up the metabolism and strengthen the heart and lungs," says Health Forum member Lana Mountford. "One of the problems I had was determining if the exercise I was doing was, in fact, aerobic. I can do something and get out of breath, but is it doing any good?"

Mountford found her answers and quickly passed them on to the forum's data library. She described a simple way of determining pulse rate and offered a formula to compute a range of target pulse rates.

Good start, but what kind of exercise activity is best? And how long should each workout be? What about intensity? Frequency?

By checking into the Sports Medicine section of HealthNet, the fitness-minded user can scan a list of favorite activities measured in METS (one MET is the amount of energy used when a person is at rest for one minute). An intensity of at least five to six METS is suggested for any fitness program (which eliminates fishing, golfing, sailing and moderate cycling). Doubles tennis, ping pong and ice skating are good, and walking is acceptable if you pick up the pace. Golf is allowed only if you tote your own clubs. Some surprises are included in the list—square dancing requires more energy than lawn mowing—so fitness fans may want to promenade past the Toro and allemande left to the nearest hoedown.

The Sports Medicine area also

discusses the pluses and minuses of running, swimming, tennis, racquetball, aerobic dancing and scuba diving. Another section links nutrition with sports and builds a good case for a high carbohydrate diet.

Overall training guidelines are available in HealthNet's "General Aspects of Exercise," listed under Sports Medicine. Workouts of at least 20 minutes are recommended and should be repeated three times a week. Warm-up stretches are advisable to reduce the chances of sprains and pains, and a cool-down regimen is prescribed to gradually decrease the intensity of activity. No fitness program—not even cruising the back nine on a motorized golf cart—should be launched without the approval of a doctor.

—Holly G. Miller

Trade 'Business Cards' Electronically

When industrial hygienists Len Wilcox of California and Jack Peterson of Wisconsin finally met face to face, they already were business partners with an important book project under way. Their collaboration had been devised online, and all that remained was for them to sign on another line—the dotted one at the bottom of a publisher's contract.

"Jack is a well-known consultant and instructor," explains Wilcox. "He wrote a textbook 10 years ago, and as a direct result of Safetynet (GO SAFETY), I'm currently revising the book for him. We never would have met, nor would he have thought enough of my expertise and writing ability to even consider me to revise his book, if not for Safetynet. Now we're using CompuServe to transfer text back and forth to save mail time."

Newcomers to various professions find it makes good business sense to simultaneously hang out a shingle and log onto CompuServe. What better way to meet professionals who have clout than to trade electronic business cards with experts around the world?

"The Public Relations and Marketing Forum (GO PRSIG) has altered my lifestyle, increased my business and changed my way of communicating," says Assistant Forum Administrator Ken Love. "I've developed some great business contacts, including a partner in Tokyo. Hiko Fukawa was one of the first to access the forum from Japan, and since then we've developed a good working relationship and are planning a number of joint efforts to promote PR and marketing services here and in Japan."

Love suggests

that forum newcomers, anxious to rub elbows with veterans in their fields, should jump into the action by posting a note to "all" on the message board. Members seldom mention their job titles or credentials when they reply, but expertise is quickly recognized in the advice offered.

"It is fun to watch what happens when newcomers drop into the Photography Forum (GO PHOTOFORUM)," says Forum Administrator Mike Wilmer. "I'm sure many times they are totally unaware that their questions are being answered by a Kodak or *Time-Life* photographer. We have an exciting group of helpful people available to lend a hand."

Even veterans find that business contacts can be quickly expanded online. Paul and Sarah Edwards, administrators of the Working from Home Forum (GO WORK), obtained their literary agent through the forum. Writer Chris Adamec has bumped into dozens of experts who have provided material for countless articles. "I've interviewed at least 20 different people I've found on CompuServe," says Adamec. "I've even written about the forums themselves for magazines such as *In Business*."

Charles Baldeck, forum administrator of Safetynet, says forum participation is a great way to "spread the word" in the professional community about particular areas of specialization. His forum is frequented by many consultants whose reputations online often lead to professional assignments offline.

"Another way the network helps its members is with advice from the more experienced members about the best way to go about tackling a project," says Baldeck. "For example, they might explain how they recruited and retained volunteers for a volunteer fire department, or how they raised funds to underwrite it. This kind of inquiry relates more to experience than simple technical information, and is one of the best ways older members can share their wisdom with newcomers."

Online contacts often evolve into offline friendships as forum members put names with faces at professional meetings.

"The PRSiggers get together once a year in person, matching the keystroke with the face, at the national Public Relations Society of America conference," says Forum Administrator Ron Solberg. "This year we'll be getting together with compatriots in Los Angeles...our fourth year running that we've pulled the group together."

—Holly G. Miller



Select Top Stocks with Online Data

People develop investment strategies in many ways. Some pick ideas from industry trade magazines. Others read books on the subject. And a growing number have learned to use the electronic resources available on CompuServe efficiently and creatively.

For example, many subscribers take advantage of the fact that there is no surcharge on information provided on H&R Block (ticker symbol HRB) in most financial programs. By actively using HRB, they can develop an in-depth understanding of the financial tools available on the service at connect-time rates. In addition, through HRB they can monitor the performance of one of the nation's larger companies to test various hypotheses.

Other subscribers have turned to the Instructions/Fees menu choices in an effort to learn more. Located throughout the financial products area, they document the many features, benefits, product alternatives and instructional issues behind CompuServe's investment products. These templates can be valuable resources to the electronic investor.

Still other subscribers look to financial sources such as Standard & Poor's (GO S&P) and Disclosure (GO DISCLOSURE) for information on investments. Although the primary purpose of these services is to provide timely informa-

tion on thousands of companies, both offer an additional feature that can be a boon to inquisitive investors. Titled "Terms and Definitions," these additional sections provide definitions on a wide range of investment topics and terminology. Individuals interested in defining what goes into an income statement item, or curious about what a "beta" value is, can get the answer with the tap of a key.

And finally, when it comes to investments, who better to learn from than other investors? CompuServe offers the Investors' Forum and the NAIC Forum, both of which educate and stimulate beginning and experienced investors.

The Investors' Forum (GO INVFORUM) provides a complete list of all stock market indexes and their respective tickers. This forum covers a broad scope of topics for more experienced investors. The NAIC Forum (GO NAIC), directed more toward new investors, provides stock study suggestions and investment ideas, along with current financial data from selected companies and information from corporate financial reports. The NAIC Forum's data libraries include recent studies, discussions of current topics, public-domain software, non-copyrighted reports and articles, a list of undervalued stocks and transcripts of online conferences.

—J. David Edwards

Make Your Micro More Productive

During the holiday season, many people get new computer systems or add new hardware and software to the systems they already have. Many questions arise before and after a purchase is made.

CompuServe can help you make the right purchase and get the most out of it.

Prospective purchasers who are CompuServe users can take advantage of Microsearch, one of the largest databases of microcomputer information available anywhere (GO MICROSEARCH). It is a database of more than 20,000 informative summaries of product reviews and product literature. Microsearch can be searched within the software and hardware categories by subject, micro or operating system, product name, manufacturer, publication, date or any combination of those factors. There is a surcharge of \$10 per hour for using the Microsearch database. You will likely find that the surcharge is a bargain as you save your own valuable time and avoid throwing money away on a purchase that is not right for you.

Even when hardware and software are purchased from reliable vendors, problems or questions often arise. Many times, the manuals do not provide answers. No matter what problem you face, chances are there are several

users on the system who have "been there before." And as any CompuServe regular will tell you, people on CompuServe are willing to help. Even if you don't have problems, CompuServe forums can provide a wealth of information on how to get the most out of your new hardware or software.

A good place to begin a search for answers or information is the CompuServe index (GO INDEX). You will be given the option of seeing all topics available in the index or of searching for a specific topic.

Suppose you have just become the owner of a new IBM computer and are seeking information about it. Typing IBM in response to the search prompt will bring you a choice of nine forums in which IBM information is available. Most beginners will probably choose to enter the New Users Forum (GO IBMNEW). Those with some experience may try the IBM Users Network (GO IBMNET).

There is a forum to cover virtually every widely used piece of computer hardware and software (and some that are not widely used). Hardware forums support Commodores, Apples, Ataris and others. Software forums are available for Ashton-Tate, Lotus, Microsoft, WordPerfect, Borland, Aldus, Adobe and others. If you are not sure which forum will meet your needs, go to one that seems close and ask. Chances are that someone will have the answer or

directions about where to seek it.

After entering one of the forums, it is a good idea to join if you think you'll be back. Joining a forum doesn't cost anything and it provides full access to the forum's features. Once you've joined, start out by reading through some of the messages by choosing the Read option from the menu. Reading through the messages will give you a good idea of the kinds of topics that forum members find interesting.

Don't be afraid to leave a message, especially if you have a question. You can address it to one of the forum administrators (sysop) or to all.

I recently spent hours trying to get my new mouse to work with Lotus. Finally, I realized that I should try the Lotus Forum (GO LOTUS). I left a message late one night and an answer was waiting for me in the morning. I've had similar success with even complex questions dealing with dBase III (GO ASHTON).

Scanning through the messages of any hardware or software forum on the system will reveal stories of users who have saved time and money by using CompuServe.

Think of CompuServe before and after making a hardware or software purchase. A CompuServe subscription kit, which includes \$25 of free connect time, is a holiday gift that keeps on giving.

—Brian D. Monahan



Mingle with Fellow Online Enthusiasts

When Larry first subscribed to CompuServe, he was unsure of how to meet people. "I didn't know anyone," he recalls. "I found myself wondering, how am I supposed to act? What should I say?"

"Once you become familiar with the logistics of logging on and navigating through the service, online communication comes naturally," says CompuServe's Donna Black, a product support specialist who trains forum administrators.

CompuServe has dozens of areas for meeting others—from the CB Simulator (GO CB) and the *You Guessed It!* game lobby (GO YGI) to the targeted subject matter found in the Tropical Fish Forum (GO FISHNET) and the Comic Book Forum (GO COMICS).

Black suggests jumping right in—searching through the forum's membership directory to see what people's interests are, then leaving a note on the forum message board telling about yourself. "It is amazing how much response introductory notices get," she says.

Conferences are another route to finding friends. Many forums schedule weekly conferences at set times; informal ones usually take place each night. There may be a guest speaker, the conference may be impromptu, or members may sound off on a pre-planned, specified topic.

During impromptu conferences, "The best thing to do is type 'hello' as soon as you come online," says Black. "That way people will know you're there and will talk to you."

Multiplayer games (GO GAMES) offer another excellent method of getting acquainted. These interactive activities enable users to communicate with players all over the country. Selections include *British Legends*, *You Guessed It!*, *Island of Kesmai*, the *MegaWars* series, *Casino* and many more. For subscribers needing guidance, there is the Multiplayer Games Forum (GO MPGAMES), The Gamers' Forum (GO GAMERS) for single-player games, online instructions and CompuServe's *Games Guide*.

"The computer provides a great way to meet people from all walks of life in an atmosphere of open communication," says Black. There are certain

guidelines:

- "It is a given that neither foul language nor illegal behavior is allowed here," Black comments. "Like every community, we adhere to the standards and rules of society in general." Each forum has the capability to block offensive transmissions. Users also can report offenders to CompuServe's Customer Service department or by typing GO FEEDBACK.
- Commercial advertising also is prohibited on CompuServe forums. Unrequested solicitations are annoying and may be against the law, depending on the circumstances.
- Subscribers may, however, buy and sell items through other areas on CompuServe. The Electronic Mall (GO MALL), among others, offers a huge array of products and services. The National Bulletin Board (GO BULLET) is only one option enabling users to post items wanted or for sale, along with notices. In addition the Worldwide Exchange (GO WWX) provides classified listings for travelers.

—Sandra Gurvis

Nobody links your IBM to CompuServe like CompuServe links your IBM to CompuServe.

Introducing professional communications software that everyone can afford: Professional Connection 3 for your IBM® computer or compatible.*

This is no ordinary communications software. This is communications software designed by CompuServe to help you get the most out of every online session.

**All the features
you'd expect in a
higher-priced package...**

Professional Connection fully automates your online routines. Exploit dozens of programmable function keys. Or get technical... with an advanced scripting language.

Have a spreadsheet you need to transfer? Professional Connection handles spreadsheets, stock quotes, and other formatted information as easily as straight text.

And of course, we've included all the standard features such as adjustable communication settings, a capture buffer, full printer support, and more.

**Plus all the extras you'd expect
from the pros at CompuServe...**

Take it fast or take it slow. Professional Connection lets you communicate at any speed, from 110 to 9600 baud.

No matter how fast you typically move data online, Professional Connection assures an accurate exchange with two types of error checking: CompuServe's own error-free transfer system B Protocol™. And XMODEM, the universally-



accepted standard for online computing services, bulletin boards, and universities.

And, with Professional Connection, you'll receive not one, but three types of graphics including files created in RLE, NAPLPS and GIF (CompuServe's Graphics Interchange Format).

That's why we call it Professional Connection.

**Start squeezing more out
of every online minute.**

Professional Connection 3 is just \$49.95. To order, type GO ORDER at any ! prompt, follow the menus

to CompuServe software products and select Professional Connection 3.

If you own Professional Connection 2, the previous release of this product, you are eligible for a discounted upgrade when ordering directly from CompuServe.

CompuServe®

5000 Arlington Centre Boulevard
Columbus, Ohio 43220

An H&R Block Company

*Professional Connection requires an IBM PC or compatible computer, a 360 KB disk drive or larger (double-sided), MS DOS 2.0 or higher, 320K memory, a modem, and a monitor. Display requirements: Color Graphics Board, Enhanced Color Graphics Board, Monochrome Board, Paradise Board, Hercules Board, the display built into the Tandy 1000, 2000, or Data General One. IBM is a registered trademark of International Business Machines Corporation. CompuServe and Professional Connection are trademarks of CompuServe Incorporated. ©1987 CompuServe Incorporated



Intriguing Islands

*From Tropical Beaches to Volcanoes,
Hawaii is a Resort Bargain*

by Loren C. Divers

Almost four years ago, I found myself moving to Hawaii. I thought it was just another state, though everybody had great things to say about it, with the cities of Honolulu, Maui, Kauai, Molokai, and Kona on an island in the middle of the Pacific Ocean.

When I landed at the Honolulu airport, I had no idea where those other cities were, but I figured they must be close by since Hawaii was so small. It turned out that these "cities" (except Honolulu and Kona) were islands. I found the neighboring islands to be fascinating, quite different from each other.

Hawaii is a chain of mountain peaks, all created by volcanic eruptions, some of which are still occurring, on the "Big Island," also called Hawaii.

Oahu is the main island in the chain, with the biggest population and the most activity. Most visitors stay in

Honolulu, the state capitol. Actually, Honolulu is Hawaii's only real city. The others are towns surrounded by the tranquil tropical waters of the Pacific, and cooled to balmy perfection by the tropical tradewinds.

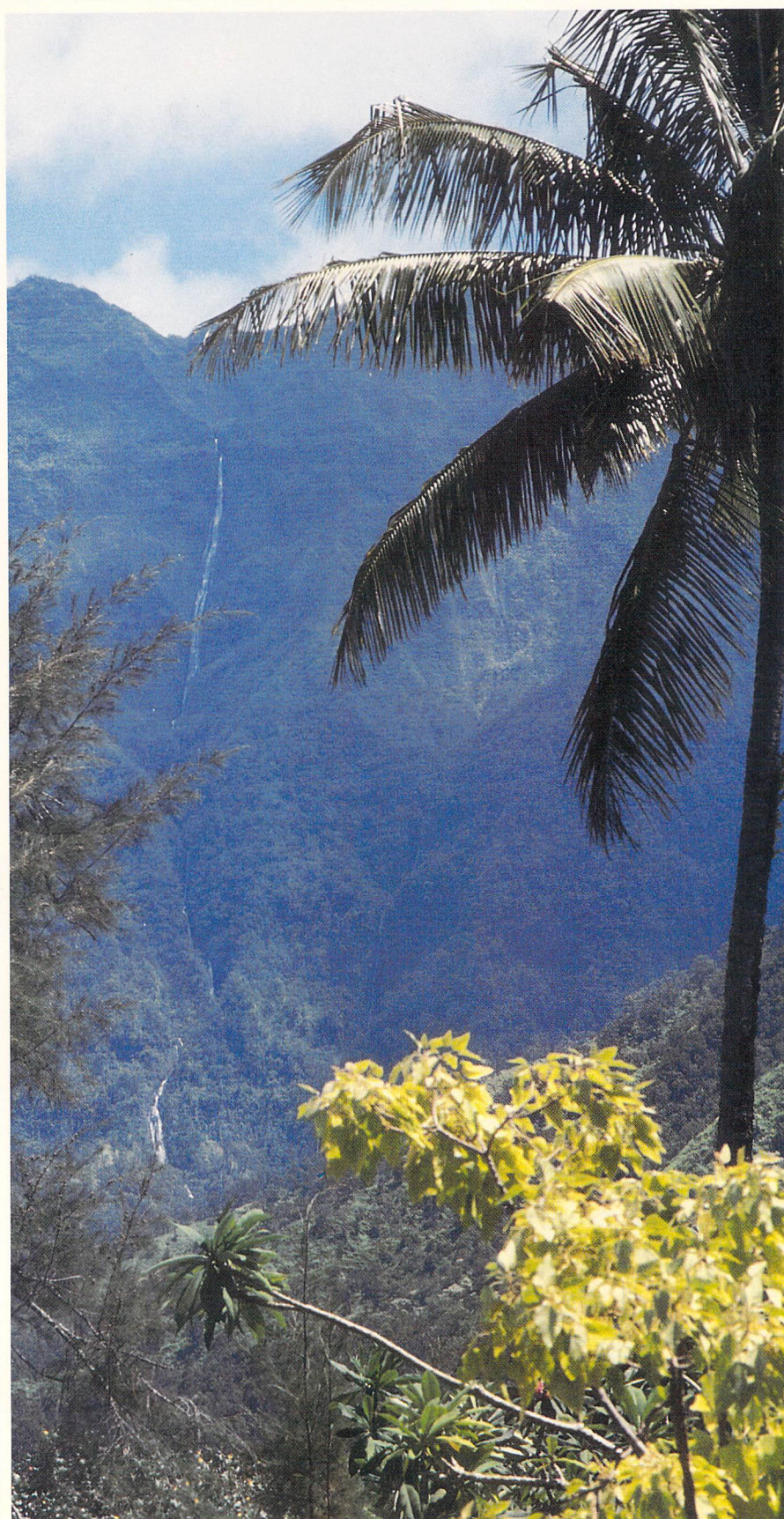
Hawaii is sophisticated in many ways, but remote enough so the pressures of wherever you came from can't follow you. Unlike New York, Chicago, or even Vancouver, Hawaii puts you in a different frame of mind. You can watch the sunset, walk the beaches any hour of the day or night and enjoy romantic evenings.

Endless activities take you into the historic Polynesian past, and other adventures—hunting wild boars, snorkeling on a tropical reef and taking glider rides—let you live out your fantasies. You can taste island cuisine and see a Polynesian show with the ancient pulsating beats of the drums.

How does one compare Hawaii to

the Mainland? I think of the New Jersey shore in the summer, the Gulf Coast of Florida and Mississippi, Galveston, Texas, and Corpus Christi. I think of the beaches of Gold Beach in Oregon, Lake Washington in Seattle, Lake Chelan. And Monterey, Malibu, Newport Beach, and Coronado come to mind, along with the beaches of the Florida coast. I've been to all of these places, and at their best, they cannot compare to the beauty, the endless white sparkling sands of Hawaii, gently caressed by the tropical seas.

You see, the Mainland (that's what the folks in Hawaii call the other "49") beaches are seasonal by Hawaiian standards, most of them humid in the summer and tempestuous in the winter, or they have cold water. By contrast, the weather is so agreeable in Hawaii, that if it ever went below 70 degrees, residents would be dropping in the streets. Year-round, the water tempera-



ture is a perfect 76 to 82 degrees, the sun shines, and if it rains, it is so warm that no one cares.

Hawaii also happens to be one of the best vacation bargains. It is a world-class destination at reasonable rates—it is hard to find rooms costing \$300 or more per night.

There are more fun, unusual activities and in greater variety than any other place in the world, except Disneyland. Part of the reason is the great number of people that came to Hawaii, loved the islands, and found any job they could. Many worked for tour and activity companies, and then started their own businesses catering to other visitors. This is an advantage, since Hawaiian vacations can be action packed or surrounded by somnolence.

For business, Hawaii is the perfect incentive destination. You can create an atmosphere of productivity and play, and if families come along, they can participate in spouse and children's programs that take them to different activities—shopping trips, special entertainment, snorkeling, kayaking, horse-back riding and hiking.

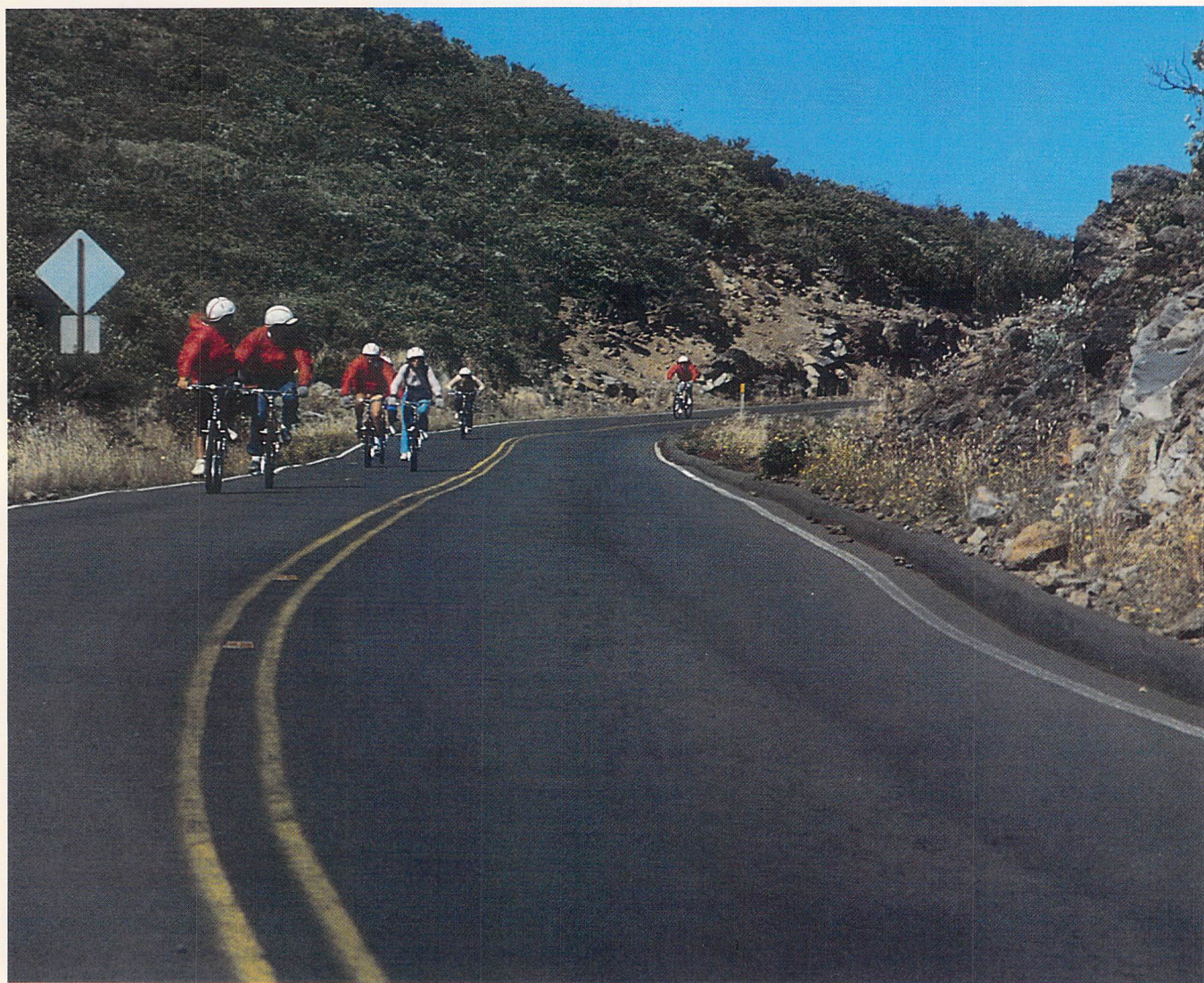
It takes months to find the secrets of these beautiful islands. The best things can escape even the most seasoned travelers to Hawaii. One reason is the tourist industry itself. Many of the hotels offer complimentary breakfasts for guests on the first morning after their arrival. There, they are given an orientation on the activities and tours. Those that are advertised are not necessarily the best, and the "free tours" are designed to get the visitors to another place where they will spend money. Free activity magazines are available everywhere. They are excellent and informative, but again, the tour vendors pay for advertising, so you do not necessarily get the best there is—or all there is—to do.

So how do you get the most out of your trip to Hawaii? For starters, arrive in the islands with plenty of advance information. It always helps to have information that was given by a seasoned expert on a certain area.

CompuServe offers online travel resources that can give you the benefit of expert information as you make plans for a trip to Hawaii.

Sun 'n Sand Vacations (GO SNS) has travel packages to Oahu and Maui. You can choose strictly "tourist class" accommodations (no frills) on Oahu at the Gateway Hotel (far from the beach, but built atop one of the best restaurants and nightspots, Nick's Fishmarket) or

Gig Greenwood



Jim Greenwood

the much better Hyatt Regency, with an excellent array of shops, restaurants and nightspots. It is just across the main street, Kalakaua Ave., from the famous Waikiki beach.

On Maui, Sun 'n Sand offers several hotels of different classes (price is a good determination of quality anywhere). This program covers air travel and hotel only, from several US geographic zones.

CompuServe has a new comprehensive service about Hawaii called The Hawaiian Concierge. Although it is a travel business and makes commission like any other, it maintains control over which activities are listed. If an attraction or activity doesn't live up to expectations—excellent service, pampered guests, informative and courteous guides—it is immediately replaced by a better vendor in The

Concierge service.

The Hawaiian Concierge is in a good position to help you if you run into problems in Hawaii. In fact, you will have both the User ID number of The Concierge, and a telephone number to call after you arrive. Travel agents in your town couldn't hope to do that, and the major tour companies that you see in the Sunday papers are usually tourist class.

Cars? Well, you can rent the major car company cars and upgrade them with some of the hotel/car packages online. You can even zoom around Oahu or Maui in a Maserati or a classic 1929 Ford Phaeton convertible.

The Concierge covers the best of air tours, driving tours, special attractions packages, water sports, outdoor activities and walking tours. You'll also find information on unusual things such as

tours to the top of the Mauna Kea volcano, bicycle rides down the slopes of Maui's Haleakala volcano (38 miles downhill), excursions into the seacaves of Kauai, special hunting trips for deer, sheep, wild boar, and kayak trips to Fiji and Tonga.

You can order tropical flowers (exotic and beautiful), Hawaii videos and an Hawaiian information packet that will make you familiar with the many things you see in The Hawaiian Concierge. You can order other catalogs by entering the catalog numbers in "Talk To The Concierge."

To start making plans for your trip to the islands, type GO HAWAII at any prompt on the CompuServe Information Service.

Loren C. Divers is a writer and information provider based in Honolulu, Hawaii. His CompuServe User ID number is 76703.4377.



USE THE BRAINS YOUR IBM WASN'T BORN WITH.

Right at your fingertips in CompuServe's IBM® Forums.

In the **IBM New Users Forum** you'll swap ideas with other new PC users, learn to use Forum features, and pose even basic questions to PC experts.

Our **IBM Junior Forum** gives PCjr® users a reliable source for tips on software, hardware, telecommunications, games and other interests.

In the **IBM Software Forum** you'll trade tips with other IBM PC and AT users on utility software, word processing, DOS and other operating systems.

Visit the **IBM Communications Forum** for advice on the features and compatibility of communications software and hardware, PC Bulletin Boards, micro-mainframe interfaces and more.

The **IBM Hardware Forum** addresses hardware topics of all types, plus product updates and announcements.

Easy access to free software— including FREE uploads.

- Download first-rate non-commercial user-supported software and utility programs.
- Upload personal files—software, application descriptions, articles, essays, news, etc.,—without connect charges.

New features increase ease-of-use and add power.

- Send EasyPlex messages to other subscribers without exiting the Forum.
- Use GO, FIND, SET and PROFILE commands in the Forum to exit and move to new areas simultaneously.
- Specify "1, 2, 3...all" Forum Subtopics for review—to streamline your message retrieval.
- Select from three levels of HELP—Instructions, Guide, or detailed prompt information.

Information you simply can't find anywhere else.

Use the *Forum Message Board* to send and receive electronic messages, and pose specific questions to other IBM and compatible owners.

Join ongoing, real-time discussions in a

Forum Conference.

Search our unparalleled *Forum Data Libraries* for free software, user tips, transcripts of online conferences and more.

Enjoy other useful services like:

- **Popular Computer Magazines**—electronic editions, for your reading pleasure. Including *Dr. Dobb's Journal* and *Computer Language*.
- **Other CompuServe Forums**—supporting LOTUS® products like *Symphony™* and *1-2-3.™* Borland International®, Ashton-Tate®, Digital Research®, MicroPro®, Microsoft® and other Software Publishing®.

Participate in the fastest-growing interactive communication revolution since the telephone.

Thousands of other personal computer users just like you have found CompuServe's hardware and software forums to be an incredibly valuable resource. Type GO IBMNET (the IBM Users Network) at any ! prompt and see what you've been missing.

CompuServe®

Timely Tax Decisions Yield High Returns

by Kathy Baird

In light of changing tax laws, taxpayers can save money by employing several tax-planning measures during the remainder of 1987. "We advise people to do an end-of-the-year review of their tax situations," says Judy Keisling, manager of tax training for H&R Block. "They should do a roughed-out calculation of where they stand this year to help assess the effects of several major tax changes that will be implemented in 1988.

"One of the things that's important is in the capital gains area," says Keisling. "If people have stocks that have appreciated in value and they're planning to sell them in the near future, it's a good idea to sell them this year if they're in a tax bracket higher than 28 percent." During 1987, the top tax rate on long-term capital gains is frozen at 28 percent, while in 1988 a surcharge of up to five percent will be assessed for married couples with incomes of more than \$71,900 and singles with incomes exceeding \$43,150.

The number of tax brackets will be reduced from five in 1987 to two in 1988. Taxpayers will fall into either the 15 percent or the 28 percent bracket, with assessment of up to a five percent surcharge for high-income earners. Although high-income taxpayers fall into the 38.5 percent tax bracket this year, next year's maximum tax payment will be only 33 percent.

Therefore, some taxpayers will want to maximize their 1987 deductions in order to minimize income under this year's higher tax rate. For those in the highest (38.5 percent) bracket, "each \$1,000 they can get into a deduction this year is worth \$385 under next year's law," says Keisling. This year is the time to have a complete physical, get braces for the children's teeth, have dental work done, or make a charitable contribution in advance for next year.

Limits have been placed on IRA deductions for incomes exceeding \$25,000 for singles and \$40,000 for joint filers, with no allowable IRA deduction for married individuals filing separately. However, self-employed individuals might want to open a Keogh account before the end of 1987. Tax-free contributions of up to 20 percent of net income can generally be made to the plan. Although December 31, 1987, is the deadline for establishing such a



Maximizing deductions: Keisling evaluates the new tax laws

plan, contributions do not have to be made until April 15, 1988.

The deduction for consumer interest is being phased out over a five-year period. Therefore, while 65 percent of interest paid on consumer debt such as personal loans and credit card purchases is deductible in 1987, only 40 percent will be deductible in 1988.

"Get those credit cards and other consumer interest loans paid off as quickly as possible if one of the reasons you financed was a tax write-off," Keisling recommends.

Some taxpayers who itemized in 1987 may no longer be able to do so in 1988. The standard deduction for itemizing will be raised from \$3,760 for the married taxpayer this year to \$5,000 next year. Under the new laws, the total miscellaneous itemized deduction must exceed two percent of adjusted gross income before any tax benefits are realized. "If your deductions are just minimal this year, that means that next year you probably won't be able to itemize," Keisling said. "Prepay in '87 if this is your situation," she says. Professional dues can be paid in advance; uniforms can be purchased; and business travel can be planned before the end of the year.

The law for claiming a dependent also has changed. The dependent's personal exemption can be claimed on only one form. "If you have dependents who are employed or have income from another source, double-check to make sure that you have paid more than 50 percent of their support this year," says Keisling.

Keisling also cautions taxpayers about changes in the laws regarding end-of-the-year stock sales. In the past, investors who sold stock within the last

five working days of the year could choose to have their profit taxed in either the year the stock was traded, or in the subsequent year in which payment was received. However, beginning in 1987, investors must record profit from stock sales in the year when the stock is actually traded.

The new tax law includes several other notable changes. Beginning in 1988, the personal exemption will be phased out for married taxpayers with incomes of more than \$149,250 and for single individuals with more than \$89,560 in income. In 1988, long-term and short-term capital gains and losses will no longer be reported separately.

A reduced deduction for investment interest will be available over the next five years until that deduction becomes limited to the amount of net investment income. From 1987 through 1991, \$10,000 in interest in excess of net investment income is deductible.

Several CompuServe services can help you assess how the new tax laws will affect you. For an itemized list of 38 major tax changes for 1987, access the H&R Block area (GO HRB). Also on the service is a file reviewing 22 major highlights of the new tax laws for 1987 and information on tax preparation courses and free tax recordkeeping books. Several online forums offer tax-related information and software in their data libraries. Using "tax" as the keyword, browse through the financial data files in the Working from Home Forum (GO WORK), the International Entrepreneurs Network (GO USEN), and the Investors' Forum (GO INVFORUM).

Kathy Baird is a free-lance writer based in Columbus, Ohio. Her CompuServe User ID number is 70007,2277.

Business Briefs

Unix Forum Now Available

CompuServe introduces the Unix Forum for the exchange of Unix-related code and discussion of Unix-related issues and experiences in this multi-user, multi-task environment.

Discussions will also include operating system issues such as input/output, protection, file systems, process scheduling and tools, including C, EMACS, MAKE and MAIL. GO UNIXFORUM

Hewlett-Packard Forum Enhanced

Hewlett-Packard North American Response Center engineers have joined the Hewlett-Packard PC Forum administrators to help find answers to questions about Hewlett-Packard-supported products.

The engineers have added Data Libraries 12, 13 and 14, which offer patches for updating programs, notes on program features and uses, recent Hewlett-Packard *Communicator* arti-

cles and answers to common questions. GO HP

Business Demographics Available

Two new demographic reports designed to help businesses analyze markets are available online.

The first, Business-to-Business Report, provides the number of employees in each Standard Industrial Classification category for a designated geographic area and includes information on all SIC categories.

The second, Advertisers' Service Report, includes data on businesses that make up the SICs for Retail Trade (categories 52 through 59).

Both reports carry a \$10 surcharge and may be requested by ZIP code, county, state, metropolitan area, ADI, DMA or the entire United States. GO DEM

"Please,
my little
girl needs
blood."



Blood saves lives. And your company can make a major contribution to the constant need for blood in your community. Please contact your local Red Cross Chapter to see how easy it is to hold a blood drive at your company.

GIVE BLOOD, PLEASE



Downloading Data to Spreadsheets Adds Up to Power, Flexibility

Because spreadsheets provide both power and flexibility for analyzing data, many CompuServe subscribers like to enhance their research of investments by downloading information to them.

They can then manipulate this information in numerous ways on the spreadsheet, based on formulas and relationships they define. This flexibility lets the do-it-yourself investor use many types of analytical tools when looking at investments.

The missing ingredient in any spreadsheet package, of course, is the data itself—and that's where CompuServe plays a vital role. By capturing online data and saving it in a file suitable for transfer to a spreadsheet package, electronic investors can equip themselves with the necessary resources to review, manipulate and analyze online data.

Here's how to download data to a spreadsheet, using Lotus 1-2-3 as an example:

Create the file in which the data will be saved and eventually transported. For Lotus 1-2-3, access Quick Quote and type /OUTPUT at the Issue prompt.

Designate an appropriate filename

that is no more than six characters in length, followed by a .PRN file extension. The .PRN extension will save the data in a format that is suitable for loading into many spreadsheets (Example: PRICES.PRN). Choose the data items you would like to have saved to the file. You can have either all of the available information from a particular program saved to a file or a subset that contains only the information you require. Keep in mind that it takes time to transfer information, so optimize this process by saving only what you need. (Example: typing /ITEMS at the Issue prompt will allow you to choose just the ticker symbols and closing prices from the menu of available data items.)

Designate the ticker symbols or CUSIP numbers of the issues you desire and indicate the relevant time period in days, weeks or months. (Example: In Quick Quote, you don't have to worry about the time period since it provides current quotes, so merely type in the ticker symbols or CUSIP numbers of interest. Try HRB, IBM and AAPL.) Once this is done, the data will be written to a file (in this example, PRICES.PRN) and conveniently stored for you in the Mquote II users area until it is deleted.

Transfer the file to your personal computer. (Example: Go to the Mquote II users area by typing GO MQUOTE at any CompuServe Information Service

prompt and type FILTRN at the first available prompt. This will engage the file transfer program so you can send the file to your microcomputer. Import the information into your spreadsheet. (Using Lotus as an example, type /FIN for File, Import, Numbers and select the file you just sent. Once you do this, the data will be entered automatically into your spreadsheet.)

Whether you are downloading current prices for portfolio evaluation from Quick Quote, or obtaining historical information for technical analysis from a program such as DATA in the Mquote II area, the process is essentially the same. Although you may encounter some subtle differences between CompuServe programs for downloading data, the steps outlined will help you download efficiently.

Could Your Business be Affected by Happenings in the Computer World Today?

Find out in *Online Today Electronic Edition*. GO OLT-90 from any prompt on the CompuServe Information Service to get daily-updated computer news.

ONLINE
T O D A Y

Capture Quotes for Stocks Online

by Brian D. Monahan

CompuServe offers an easy, inexpensive way to obtain information on securities. From the Market Quotes menu, you can obtain quotes on stocks listed on all of the major exchanges and on most over-the-counter issues. To get started, type GO QUOTES at any prompt. Help is available at any point by typing /H and selecting "Instructions/Fees" from the available menu choice. From the Market Quotes menu, it is possible to obtain quotes on stocks listed on all the major exchanges and on most over-the-counter issues.

Current Quotes

Most often, users will want to find a current quote. To do this, select that option at the Market Quotes menu and respond to the Issue prompt with the ticker symbol (such as IBM). If you do not know the name of a security, you can find it by typing an asterisk followed by the portion of the company name that you're most sure about.

After you've typed in the symbol, the system returns the name of the company, the volume, the high and low price, the change and the time the price was last updated.

To save time, as many as 20 symbols may be typed on the same line. You also may store the symbols that you regularly use in a file, expediting data entry. Retrieved data may be directed to an output file in a format readable by microcomputer software (see accompanying story). Often, users will send the output to a .PRN file for use with Lotus 1-2-3.

Screening Companies

From the Securities menu, it is possible to obtain the pricing history of a stock on a daily, weekly or monthly basis. For the period requested, the system returns the volume for the period, and the high, low and closing prices.

It is possible to obtain information on multiple issues. If desired, only selected information for those issues can be requested. Also, you can access information on dividends and splits for the issues selected. If you are running appropriate software (Professional Connection 3.1 or other VIDTEX software), it is possible to obtain a graph of the price/volume information.

A company screening option is also

available by typing GO QUOTES. This feature lets you screen more than 10,000 companies based on selected criteria.

The ticker symbols of the companies that result from the screening can be saved for use with other CompuServe programs. The selection criteria include a variety of growth rates and financial ratios, total assets and book value. Criteria for the search may be expressed with relational operators (GT for greater than, LT for less than).

After you type in a rule, the system will tell you how many companies meet the criteria. At that point, the search may be further limited or abandoned. Once the number of companies has been reduced to a manageable level, you can either produce a report or save a file that includes the symbols.

Charges

In addition to the regular connect charges, there are surcharges for the use of many of the options offered at GO QUOTES. Those charges are fully explained online and can be studied by typing GO RATES before obtaining the quotes.

The information available online through CompuServe is, of course, available elsewhere. You can drive to your local library or subscribe to one of the expensive publications that provides such information, but your information will not be as timely. (CompuServe stock quotes are delayed 20 minutes.) Also, your investment in time probably will be considerable. Whereas with the appropriate software (Professional Connection 3.1, for example), you can develop scripts for interacting with CompuServe that provide the desired information almost instantly.

It is natural to be a bit apprehensive about using a service that has surcharges. However, those who use CompuServe's facility for downloading securities information find the investment to be nominal and the time savings to be significant. In addition, the ability to analyze the downloaded information through the use of a variety of other software may provide investment insights not available through the use of other media.



USE YOUR COMPUTER TO STOP SMOKING NOW!

All the help of an in-person stop smoking clinic is as close as your keyboard.

Kick the habit in four painless weeks

DON'T LIGHT UP

GO NOSMOKE

THE STOP SMOKING SYSTEM

A Joint Project of
BEHAVIORAL HEALTH SYSTEMS, INC. & ROBERT WALTER COMMUNICATIONS, INC.
GO OLI or circle 12 on the Reader Service Form.

**CAPITAL
AVAILABLE**
\$1,000,000
Minimum

Will assist with
financial plan.
For information
call Mr. ADAMS
at
714/964-2386
Westex

GO OLI or circle 9 on the Reader Service Form.

Help for the Holidays

Services Provide Gift Suggestions

by Sandra Gurvis

If you're trying to decide what gift to give someone, you can browse through hundreds of possibilities without having to worry about finding a parking space at the shopping center. Instead of waiting in long lines, go online.

For starters, CompuServe's Electronic Mall offers Holiday Bazaar '87 (GO HOL), an online catalog with hundreds of gift suggestions in 12 categories. Choose from "Pearls and Other Pleasures" (jewelry, perfume, games and books); "Beyond Ties and Cologne" (racing bikes, best-selling novels); "Babes in Toyland," "Sugar and Spice," and "Snakes and Snails" (all offering gifts for children); and "Teenage Tickets to Ride" (jeans, Pink Floyd records and other gifts for teens). Gifts in "Scrooge's Source" are \$10 or less, and those in "Rudolph's Ransom" are \$1,000 or more. "Out of the Ordinary Offerings" (fresh-frozen rattlesnake meat, black satin bow ties and more) are sure to get attention. You can even send an EasyPlex message to Santa for additional suggestions, and children can leave Santa their wish lists electronically.

"This year's Holiday Bazaar will be better than ever," says Cindy Morgan, promotion consultant to The Mall. New



Better than Santa: Morgan offers gifts

merchants include the Metropolitan Museum of Art, Brooks Brothers, Pepperidge Farms and Tele-Charge for Shubert Theatre tickets. Merchants on the Holiday Hotline feature free connect time and special offers, and you can receive their luxury catalogs free or at a nominal cost. All items can be purchased online.

Other seasonal items, such as turkeys or foodstuffs, holiday greeting cards and Christmas flowers, also are available at The Holiday Bazaar.

From the Bazaar it's a keystroke to The Electronic Mall with its many specialty merchants offering products and services (GO MALL).

In addition to The Mall, CompuServe offers other gift resources for traditional and innovative shoppers. And you might even be able to get a free Christmas tree. Here are some other places to look:

Demographic Services (GO DEMOGRAPHICS). The Neighborhood ZIP Reports menu includes a Neighborhood Gift Idea Report for any ZIP code. Simply type in the ZIP code of the person you wish to buy a gift for and it will scroll out an 80-column graph of household, women's, men's, and children's gift ideas. Data is drawn from a syndicated survey of consumer behavior and purchasing patterns. The estimate is based on the stated preferences of people in the ZIP code area you choose. Each ZIP code request carries a surcharge of \$10.

Microsearch (GO MSH). Search no further for gifts for the computer buff. Microsearch contains more than 20,000 abstracts, including product reviews from more than 200 publications and literature from more than 4,500 manufacturers/software publishers. Approximately 1,000 abstracts are added each month.

Along with the extensive software and hardware database, a manufacturer's directory provides contacts to companies for ordering products. In addition, users can search by subject, microcomputer or operating system, product name, manufacturer, publication, date, document type or a combination of keywords. Product reviews are especially helpful in evaluating the advantages and weaknesses of gifts. One important tip: find out a specific name or type of product beforehand to save time and money. This service has a \$10 per hour surcharge.

Information USA (GO INFOUSA). Feeling a bit pinched in the pocket or looking for a gift for someone who has

everything? This service, containing a sampler of a 1,250-page book, *Information USA* by Matthew Lesko, includes ideas and resources from government agencies. The "Best of the Freebies" section, for example, lets non-profit organizations obtain free Christmas trees. Commercial companies and individuals can cut their own trees for \$1.

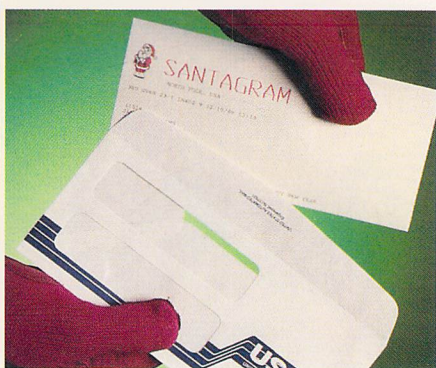
You'll also find gift suggestions, ranging from cosmetics to space souvenirs. Check the service for source information. "Gifts from Uncle Sam" offers hundreds of items from less than \$5 (posters, cards) to \$10,000 (renovating an American Indian cultural center, providing a demonstration village for the Chumash tribe). Many items, such as historical maps, presidential medals and reproductions of McGuffey readers, cannot be found elsewhere. Subscribers also can obtain free catalogs from various agencies.

Consumer Electronics Forum (GO CEFORUM). Know someone with a passion for electronic goodies? This forum provides the latest information on consumer audio and video items, software, satellite systems and telephone equipment. Data Library 10, "New Products/News," has reports on electronics shows and publicity releases from product manufacturers. Items such as the Videonics personal moviemaker, a Core macro universal remote control, and laser disc players by Denon, Yamaha and Panasonic are detailed here. Forum members often have the advantage of learning about a product before it hits the market. Prices are also included.

The Bacchus Wine Forum (GO WINEFORUM). The forum's holiday gift guide can help budding enophiles select a wine for that special someone. (The forum itself is an extensive database on wine and all its accoutrements.) In addition, Jim Kronman, forum administrator, will provide a potpourri of suggestions on bottle openers, books, glasses and even systems that help preserve partial bottles of wine. Watch the forum message board for details.

Online shopping gives subscribers an efficient method of selecting gifts without the hassles associated with traditional holiday gift shopping. "You can log on and take care of your holiday needs in three hours or less," says Morgan.

Sandra Gurvis is a free-lance writer based in Pickerington, Ohio. Her CompuServe User ID number is 70007,2302.



Tom Hogan

Send a SantaGram

Instead of writing out Christmas cards by hand, you can electronically send holiday greetings to anyone in the continental United States.

SantaGrams, letters written by you just like an EasyPlex message—except that you sign Santa's name, are delivered by the US Postal Service to the children and adults on your Christmas list. Featuring a color picture of Santa, a bright red "SantaGram" banner at the top of the message and a return address of the North Pole, SantaGrams can be up to 100 lines long.

SantaGrams sent from now through Dec. 22 will be delivered before Christmas. For post-holiday greetings, you can send them until mid-January. The cost is \$2 each.

To send SantaGrams, access the EasyPlex main menu (GO EASY) and choose option 9, "SantaGrams." If you're using prompt or command mode, just type SANTA at the main EasyPlex prompt. For ideas of greetings to include in a SantaGram, type HELP SAMPLES at the EasyPlex main menu prompt.

Next, type in your message from Santa as you would type any EasyPlex message. In this case, you can omit the "To," "From" and "Subject" information. The maximum line width is 69 characters. Type Santa's name at the end and then type /EXIT or /SEND. You'll be prompted for the recipient's name and street address, city, state and ZIP code. After you've typed in the address, you'll have a chance to edit it.

After your SantaGram has been sent, you can modify it and send it to another person. Choose option 7, "Edit Last Message," from the EasyPlex main menu. Or write a new SantaGram by choosing option 9, "SantaGrams," from the EasyPlex main menu or by typing SANTA at the EasyPlex main prompt (if you are in prompt or command mode).



Florida Sales Tax Applied

Effective immediately, the state of Florida requires that its residents pay a 5 percent sales tax on purchase orders placed through CompuServe's product ordering area and on CompuServe services.

The tax also applies to supplemental telecommunications and product surcharges and will be added to all Florida subscribers' CompuServe charges.

New Automotive Menu Online

A new automotive information menu that lists all current automotive services on CompuServe is available in the Home/Health/Family area.

The new menu features automotive accessories, buying and leasing, auto racing, the New Car Showroom and auto-related merchants in The Electronic Mall. New automotive services will be added to the menu as they become available. GO AUTO

Games Topic Added to Q&A

CompuServe's Customer Service has added a games topic to the Online Question and Answer Database.

The database topic provides reference information for games players and an overview of terminal information needed to play games.

Subscribers also can find answers to questions about billing, logging on, using forums and the Personal File area, setting up a Personal Menu and sending EasyPlex messages. GO QUESTIONS

WWX Adds Online Listings

Worldwide Property Guide now allows CompuServe subscribers to list their vacation properties by completing an order form online.

Subscribers who have vacation property available for rent, sale or exchange may list it in both the online and printed Worldwide Property Guides for a minimal fee. Subscribers also may shop for vacation properties in the guides. GO WWX

Travelshopper Offers UA Seats

Reservations on all United Airlines flights worldwide can now be made through Travelshopper without a sur-

charge.

United Airlines, America's largest airline, also makes schedules and fares, including first-class and non-refundable discount fares, available online through Travelshopper. GO TWA

NORD Database Adds Articles

The National Organization of Rare Diseases' Rare Disease Database has added many articles to the Prevalent Health Conditions/Concerns area.

Additions to the Diet/Digestive Diseases section include "Nutrition and the Athlete," "Some Facts and Myths About Vitamins" and "Planning for a Healthy Heart." "Out of the Bronzed Age" has been added to the General Health section.

The Drug/Orphan Drug/Products section now includes "Protecting Tots from Drug Poisonings," "Dangerous Drugs from South of the Border," "The Pill May Not Mix Well with Other Drugs," and "Experimental Drugs for the Desperately Ill." GO NORD



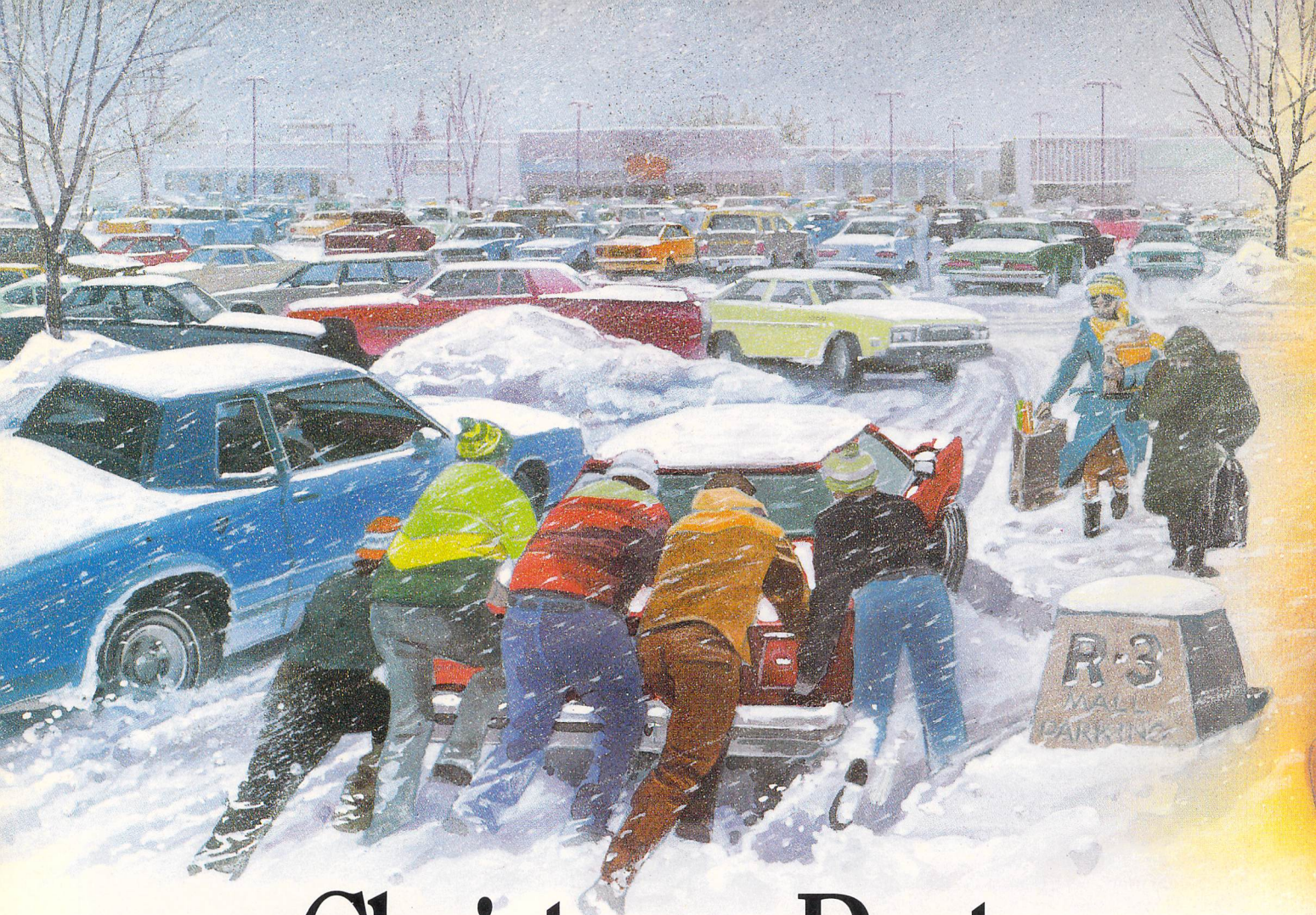
Chip Bartholmeas

New Space/Astronomy Info Online

The Space/Astronomy database, featuring news and information to complement the existing Space, Space Education and Astronomy Forums, is now online.

The database contains aerospace news stories, an aerospace editorial page, detailed information about space program spin-offs, an archive of US space missions, high school space shuttle experiment documentation and UFO reports.

Current astronomy events, a weekly guide to observation targets, a complete guide to planetariums and an online course in beginning astronomy are also featured in the database. GO SPACE



Christmas Past.

Holiday shop conveniently in the comfort

Fighting Christmastime crowds can turn the happiest of holidays into one big headache. That's why CompuServe and the merchants in THE ELECTRONIC MALL™ got together to bring you Holiday Bazaar '87—a fun and convenient way to shop. Without ever leaving home, you can buy online from Brooks Brothers, General Nutrition Corporation, Pepperidge Farms, The Metropolitan Museum of Art and many other famous retailers

across the country.

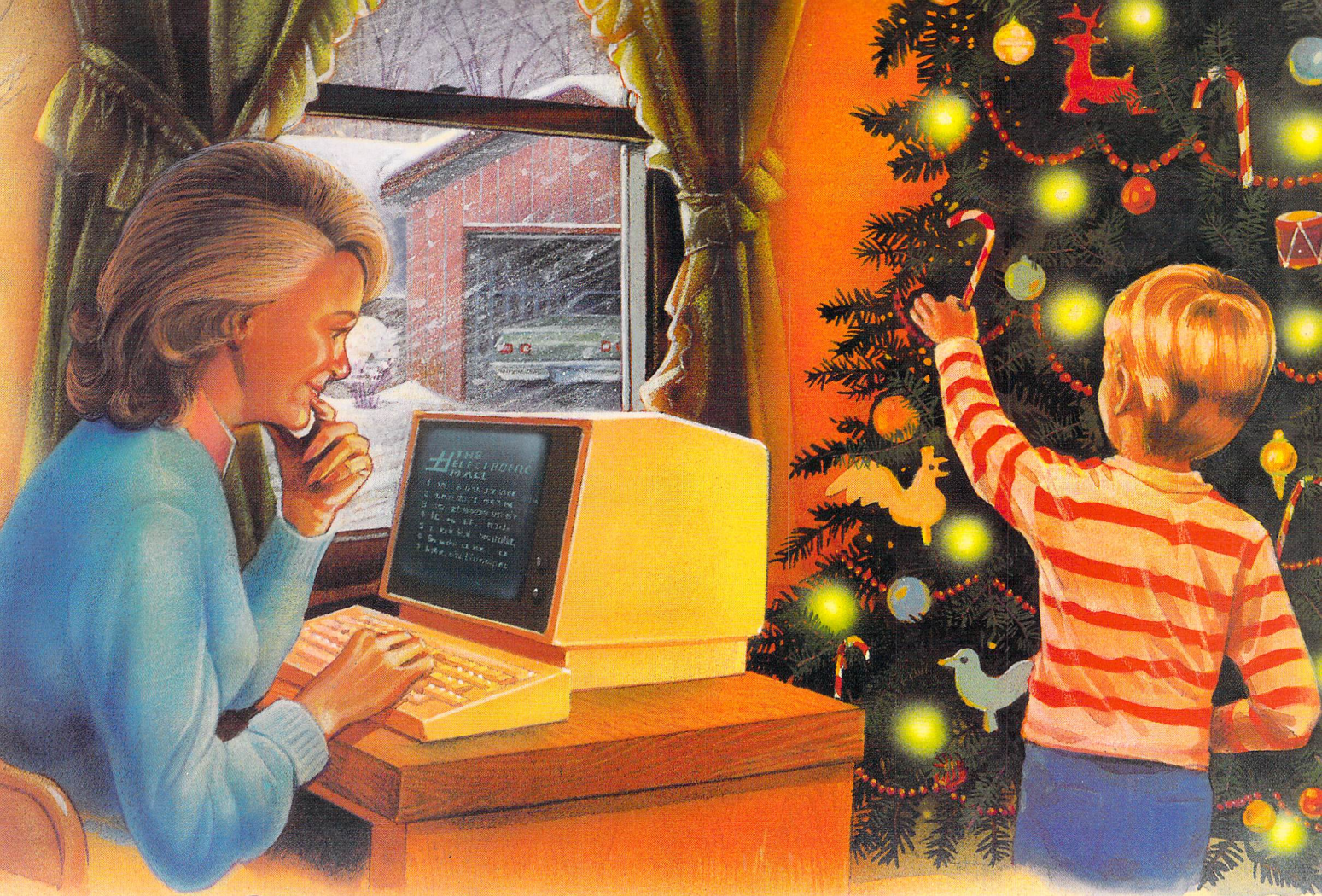
This year, CompuServe has a special gift for ELECTRONIC MALL shoppers.

Starting November 1, the first 500 shoppers to

spend more than \$50 in THE ELECTRONIC MALL during any 24-hour period will receive \$5 free connect time.

From software to sportswear, toys to tools and flowers to fruits, Holiday Bazaar '87 has gifts that are guaranteed to please everyone on your list. Plan your visits department by department, including stops in Apparel & Accessories, Automotive, Books, Gifts & Novelties, Computing, Gourmet & Flowers, Home & Appliances, Hobbies & Toys, Merchandise & Electronics, Online Services, Periodicals, Premium Merchants, Music & Movies, Health & Beauty, Financial and Travel. There's something for every member of the family.





Christmas Present. of CompuServe's ELECTRONIC MALL.

In addition to fabulous gift selections, Holiday Bazaar '87 features some unique services you won't find anywhere else. The **Holiday Gift Giving Guide** offers hundreds of gift ideas, organized by category. So if you're puzzled over the perfect gift for Peter or Pamela, the Gift Giving Guide can provide you with clues.

For quick communication with the North Pole, **Talk to Santa**. The jolly ol' elf himself will be available to receive letters from kids, or to help puzzled adults. If you're at a loss over a special gift for someone, leave a message with Santa, and he'll get back to you [through EasyPlex™] with just the



right gift suggestions. And while you're online, be sure to check out **Holiday Hotline** for new merchandise, events and special promotions, including **Mistletoe on the Mall**.

This Christmas, save your sanity and shop in the mall—CompuServe's ELECTRONIC MALL. No parking, no waiting, no hassle. THE ELECTRONIC MALL. A Christmas present for you—from your friends at CompuServe.

**THE
ELECTRONIC
MALL**

P.O. Box 20212
5000 Arlington Centre Blvd., Columbus, Ohio 43220

THE ELECTRONIC MALL and EasyPlex are trademarks of CompuServe Incorporated.

Sources for Shoppers

The Electronic Mall Offers Seasonal Selections

If you've procrastinated buying presents for friends and relatives this year, don't despair! Here's a list of some of the Mall merchants featuring great gifts for last-minute shoppers.

Coffee Emporium

This Mall merchant offers two-day UPS service for all of its products. Consult the online tasting chart and then browse the selection of more than 20 gourmet coffees. Perfect for gift-giving are Coffee Emporium's Sampler Packs. Flavored coffees Chocolate Mint, Amaretto, Irish Cream, Chocolate Almond and Grand Marnier, many of which also are available in decaffeinated blends. For tea drinkers select from Darjeeling, Jasmine, Earl Grey, or Blackberry and others. Complete your gift with an appropriate accessory. Perhaps a computer mug to go with a pound of coffee or a lovely miniature iron Japanese teapot to accompany a selection of teas. For coffee and tea to go, GO COF.



Florida Fruit Shippers

Unless you live in a grove, you can't get fresher, sweeter fruit. Florida Fruit Shippers picks, packs and ships grove-fresh fruits and rushes them to you round-the-clock using their own trucks or via UPS air. For the holidays, order as late as December 18 for guaranteed delivery. For orders posted after the 18th, subscribers are encouraged to contact Florida Fruit Shippers via EasyPlex regarding delivery. If at all possible, Florida Fruit Shippers will get your gift there in time for the holidays.

Select grove-fresh, seedless navel oranges, holiday mandarins, or Duncan grapefruit, the premier grapefruit. All are available in quarter, half and full bushel sizes. On request, each piece of fruit will be wrapped in a "Season's Greetings" wrapper. Or consider the Tropical Luau, an exotic taste treat; the

Sunshine rum cake, a moist, melt-in-your-mouth delight drenched in rich rum; or a combo of fresh Florida seafood featuring giant crab claws and lobster tails. Prices include all shipping fees. For the best Florida has to offer, GO FFS.



Simon David

This Dallas-based gourmet shop features a selection of holiday treats, including candies, fruitcakes and specialty meats. Simon David's specialty meats, shipped via UPS Next Day or Second-Day service, make great last-minute gifts for friends, relatives or business associates. Choose from Colorado-selected lamb chops, veal Paupette, Virginia smoked ham, filet mignon or sirloin strip steaks. Each gift box includes only the finest meats available. To truly surprise someone this season, consider sending Simon David's fresh frozen rattlesnake meat.

Other delicious gift suggestions available online include pecan pralines, a Texas gift box and the famous Simon David holiday fruitcake. To shop the best little gourmet shop in Texas, GO SIM.

Fifth Avenue Shopper

Visit Fifth Avenue Shopper's Flower & Fruit Shop where a selection of gifts awaits you. Surprise family and friends with a Season's Greetings bouquet, a lovely selection of seasonal flowers arranged in the holiday spirit. Or send poinsettias in full bloom, available in two sizes. Also recommended is the holiday fruit basket, a tasteful selection finished with holiday trim. For fruits and flowers to go, GO FTH.

Walter Knoll Florist

Walter Knoll Florist also offers shoppers a selection of holiday flowers and gifts, including holiday arrange-

ments, wreaths and poinsettias. Especially recommended for distant friends and relatives is the holiday door hanging, a grapevine wreath with holiday trimmings. For younger folk, consider the St. Nicholas Bear Bouquet, a cuddly Santa Bear bearing flowers and candy. Many unique holiday gifts await you when you GO WK.

Hawaiian Isle

For floral arrangements, visit Hawaiian Isle's Tropical Garden. Select a dozen Hawaiian orchid sprays. For centuries the orchid has symbolized love and friendship. These dozen long-stemmed beauties are only \$40, delivery included. Or select an island assortment, such as the King Kamehameha arrangement. This selection includes Red Anthurium, Bird of Paradise, Red Ginger Blossoms and exotic Winter Ti Leaves, also \$40, delivery included. Especially recommended for the holidays is the Hawaiian Christmas Wreath, an exotic handmade wreath from Hawaii. All floral arrangements are shipped via Purolator Courier. To send someone a little piece of paradise, GO HI.



Lincoln Manor Baskets

More gift ideas await at Lincoln Manor Baskets, a custom gift basket service.

Each beautiful basket is brimming with a selection of carefully chosen goodies. For clients and business associates, Lincoln Manor recommends the Eat, Drink and Be Merry Basket, a wicker basket full of holiday cheer. For the old-fashioned type, try the Victorian Christmas basket, a lovely basket filled with sachets, soaps, stationery and other delicate delights.

For friends and relatives, send Season's Greetings with the Yuletide Fireside basket, a hand-woven basket full of goodies. Finally, for that special someone on your list, select the Breakfast-In-Bed basket, a romantic and tasty treat for Christmas morning. For holiday delivery, please order by December 15. To send a basket of good cheer, GO LM.

Air France

For still another source of far-flung fantasies, take a trip to Air France. Book a French fling in Paris or a week of sun-soaked fun on the Riviera. Plot a late spring ski soiree in the Swiss Alps or a tête-à-tête for two in Tahiti. A wide selection of vacation packages awaits you online. Order free brochures to tuck in the toe of someone's stocking. Or borrow tapes from Air France's

video library. On Christmas morning you can pop the cassette in the VHS and start dreaming about your dream vacation. To give someone springtime in Paris, GO AF.

Inside * Outside Lingerie

Finally, if there's a lady on your list, we suggest a trip to Inside * Outside Lingerie.

You can win her heart this holiday

season with romantic cottons, sexy silks or a little lace. Inside * Outside offers a special overnight delivery service and welcomes holiday orders as late as December 22. Especially recommended for Christmas are the bright red silk camisole and tap set, the Queen Anne's coat and gown set, and the silk spaghetti-strap sleep chemise, trimmed with heirloom lace. For a gift sure to make her smile, GO IO.

APPAREL/ACCESSORIES

- APC Apparel Concepts for Men ■
- GD The Gold Connection
- BR Brooks Brothers ■ †
- IO Inside * Outside Lingerie ■ *
- MJ Milkins Jewelers ■

AUTO

- AV AutoVision
- BU Buick Magazine ■
- CHV Chevy Showroom ■
- DU Dutchess CompuLease
- FMC Ford Motor Co. ■

BOOKS/PERIODICALS

- BAL Ballantine Books
- DJ Dow Jones & Co.
- MH The McGraw-Hill Book Co.
- MER Mercury House
- BK Small Computer Book Club
- TL Time-Life Books †
- WB Waldenbooks

COMPUTING

- ATN Aaxion Tech Network ■
- PRT Butler Graphics †
- CDA CDA Computer Sales ■ *
- CD Computer Discount Warehouse †
- CE Computer Express *•
- GL Great Lakes Business Forms
- HTH The Heath Co. ■
- IBM IBM Canada Ltd.
- IS Investment Software ■
- MM Marymac Industries Inc.
- MNU Menu International
- NT Nitro Micro ■ †
- SAF Safeware ■ †
- SDA Software Discounters of America
- VC Virtusonics †

FINANCIAL

- INC Business Incorporating Guide
- FT First Texas Savings
- HRB H&R Block
- MU Max Ule Discount Brokerage

GIFTS/NOVELTIES

- BG BannerGram by Mail
- HI Hawaiian Isle
- JE J.E. Smith Brassware
- LM Lincoln Manor Baskets

GOURMET/FLOWERS

- COF Coffee Emporium ■
- FTH Fifth Avenue Shopper
- FFS Florida Fruit Shippers ■
- PF Pepperidge Farm ■ †
- SIM Simon David
- WK Walter Knoll Florist •

HEALTH/BEAUTY

- BS B&K Beauty Supplies
- GN General Nutrition Corporation †

HOBBIES/TOYS

- DD Don's Dollhouse & Miniatures *•
- HC Hobby Center Toys
- DO The Doll Place
- TSR TSR Hobby Shop ■ *

MERCHANDISE/ELECTRONICS

- ATT AT&T
- BD Black & Decker Powerline Network *•
- ORD CompuServe Store
- CFD Crutchfield ■
- GC Garden Camera & Electronics *
- SV Stereo/Video Factory

MUSIC/MOVIES

- BMG BMG Direct Marketing, Inc.
- EMC Express Music *
- MV Magic Castle Video
- MAO Music Alley Online

OFFICE SUPPLIES

- EX Executive Stamper
- OM Office Machines & Supplies ■ *
- SC Stationery Center •

ONLINE SERVICES

- EF EF Hutton ■
- NN NewsNet
- OA Official Airline Guides, Inc. ■

PREMIUM MERCHANTS

- AXM American Express Merchandise ■
- HS Hammacher Schlemmer ■ †
- MMA Metropolitan Museum of Art *
- MC Morrell and Company †

SPORTS/LEISURE

- BB Bike Barn
- RR Rin Robyn Pool 'N Patio ■

TRAVEL/ENTERTAINMENT

- AF Air France ■
- AT Ameropa Travel ■
- TC Tele-Charge—Theatre tickets †

- Offers free print catalog.
- * Denotes electronic order form for use with print catalog.
- Credits cost of print catalog toward purchase.
- † Denotes new merchant.

Gift of Time

Online Today offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced and sent to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

If we use your column, you will receive 10 hours of standard service connect time (a \$60 value) and a byline.

Parents Use CompuServe To Teach Children at Home

My wife, Barbara, and I are using CompuServe to home-school our two children, Sarah, 12, and Rebecca, 9. Sarah has multiple physical handicaps and is legally blind, so Barbara has been typing her worksheets into our word processor and printing them in enlarged, emphasized print. This worked well until we needed geography worksheets; maps do not lend themselves to this application. I was pleased and a little surprised to find libraries of high-resolution maps of most parts of the world in the data libraries of the Commodore Arts and Games Forum (GO CBMART). With a program I wrote, I can easily convert these files into graphic files compatible with my word processor. They print in enlarged, triple-density mode.

I am now looking through these libraries more closely and finding many files suitable for use as illustrations. Programs such as CADV2 from the same area also allow me to easily draw my own illustrations for use in math.

Allen R. Mulvey
Fulton, N.Y.

Ask Customer Service

Q: What is my Personal File Area?

A: The Personal File Area provides you with your own private file maintenance and processing system. You can create files at your terminal and use CompuServe's facilities for file storage and manipulation. As a subscriber, you are entitled to 128K of storage space in

your Personal File Area. Information can be stored there for 30 days (six months for subscribers with the Executive Option). Additional storage space is available at an additional charge by contacting Customer Service.

Q: How do I get to my Personal File Area?

A: Your Personal File Area is in the

Computers/Technology area of the CompuServe Information Service. You can choose Option 11 from the top menu and then select Option 7 for the Personal File Area. You also may type GO PER at any prompt to directly access this area.

Q: What would I use my Personal File Area for?

A: It's a convenient place to store EasyPlex messages, Executive News Service clippings, files (for storage or transfer), text for form letters, programming code and more. In addition, you can issue commands from this area to obtain information about your current status (DAY, JOB, STAT) and perform other standard CompuServe functions (SET, NEWS, DOC).

Q: When I selected a detailed directory of my files in the Personal File Area, a screen message displayed the total number of blocks. What is a block?

A: A block of information in your Personal File Area is equivalent to approximately 640 characters. Each CompuServe subscriber has a total of 200 blocks or 128K of storage space. Executive Option subscribers have 192K in their Personal File Areas.

Q: There is a selection from the PER menu to enter command mode. I tried this and received an OK prompt. What should I do?

A: Like EasyPlex, the Personal File Area offers a command mode for expert users. The command mode is the most efficient means for performing all Personal File Area functions. If you intend to use this area often, you should learn the commands. Type HELP at the OK prompt for a list of available commands and for "Help" information.

Q: Where else can I get help with my Personal File Area?

A: CompuServe offers a Personal File Area Users Guide. Sophisticated file-management programs, two types of text editors, disk storage conservation techniques, shortcuts for sending files such as EasyPlex messages, and more are documented in this manual. To order it, type GO ORDER at any prompt.

—Sally Wardlow

In November, **PaperChase** offered you and our thousands of monthly CompuServe users a **25% discount** if you did your searches between 6pm and 8am local time or on weekends. And you did! In overwhelming numbers! So, we're doing it again - this time for twice as long!

Beginning December 1, and **for the next 60 days**, you get the same benefits PaperChase users always get, and for 25% off at specified times.

- the largest biomedical database in the world! Over 5 million references from over 4,000 international journals.
- a user-friendly service, with easy-to-follow search menus.
- copies of the articles you need - delivered promptly.
- up-to-the-minute biomedical information. Each day 900 new references are added! **Each day!**
- help when you need it on our toll-free 800 line. Or leave us a Comment online or an EasyPlex message at 76703,2003.

We're doing this again because you liked our offer and we're really user-friendly. Especially when you do your searches between 6pm and 8am local times or on weekends.

GO PCH

Remember, we'll always be the biggest biomedical database in the world.

PaperChase

Beth Israel Hospital
330 Brookline Avenue
Boston, MA 02215

617-735-2253 800-722-2075

GO OLI or circle 13 on the Reader Service Form.

Expand Your Capabilities with New Forum Files

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in the *Online Today Electronic Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added twice monthly.

AMIGA FORUM

(GO AMIGAForum)

Date Conversions—A callable DATE subroutine for the Amiga that, when linked to your own Amiga program, can perform standard but useful date conversions and calculations. Full documentation and source included. File DATE.ARC in Data Library 9.

IBM Drive Interface—A textfile that describes how to make an IBM 5¼-inch drive interface with an Amiga. Includes instructions and schematics. File IBMDR.ARC in Data Library 11.

ATARI 8-BIT FORUM

(GO ATARI 8-BIT)

Shut the Valves—*Roto-Wrench*, a BASIC game. Close all the valves before time runs out. File RTOWRN.BAS in Data Library 1.

Chicken—*Chicken XL*, a BASIC game for the Atari XL. Files CHICKN.BAS and CHICKN.DOC in Data Library 1.

ATARI 16-BIT FORUM

(GO ATARI16)

Modified EMACS—A version of the EMACS editor modified to take advantage of some features of the Digital Equipment Corp.'s EDT editor program. File STEDT.ARC in Data Library 0.

Breakout—A full-screen, full-color advanced *Breakout/Arkanoid*-type game for the Atari ST. Requires color monitor and uses mouse. File BNOLD.ARC in Data Library 1.

Atari BBS—The Citadel Public Domain BBS for the Atari ST. Files STADL1.ARC, STADL2.ARC, STADL3.ARC and STADL4.ARC in Data Library 2.

COMMODORE MUSIC, GRAPHICS AND GAMES FORUM

(GO CBMART)

Wheel of Fortune—More accessories for the popular *Wheel of Fortune* game available in CBMART. New files include WOFLST.BIN, STND2.LST, FOOD.LST, VIDEO.LST and WOFLST.HLP, all in Data Library 11.

New CAD Version—CAD 4.0 the latest version of the popular CAD series by Steve Nye for the Commodore. New version includes a pull-down main menu, on-screen help files for all draw mode commands, screen compression, a revised command structure that decreases disk accesses by about 50 percent and new commands not available in 3.0. Files CAD401.BIN, CAD402.BIN and CAD403.BIN in Data Library 12.

IBM COMMUNICATIONS FORUM

(GO IBMCOM)

CB Lister—A sophisticated system for maintaining a list of users seen on the CB Simulator and in forum conferences. User ID numbers, nodes, handles, times and frequency of appearance are tracked with virtually instant data recall. Requires 348K and hard disk. File CBDB.ARC in Data Library 2.

Phone Dialer—A background program that will dial up to five numbers while you continue to use your computer. When Dialer gets through, it will sound a short alarm. You can then load your modem program and proceed. File DIALER.ARC in Data Library 2.

BBS Numbers—A list of nearly 5,000 BBS phone numbers. File BBSNAT.ARC in Data Library 4.

IBM NEW USERS FORUM

(GO IBMNEW)

Music Player—Vmusic, a polyphonic music-playing program with four sample music files. You can create more of your own. File VMUSIC.ARC in Data Library 4.

Arcade Game—A 640-by-200 arcade shoot-'em-up game similar to *Space Invaders*. Written in assembler so it's fast and smooth. Requires a graphics card. File BLORTI.COM in Data Library 6.

Number Teacher—A program targeted for one to three year olds. COUNT210 teaches them to count to 10 by displaying large numbers on the screen and by saying those numbers aloud through the IBM PC speaker. Works with monochrome and color systems on IBM PCs or close compatibles. File COUNT2.ARC in Data Library 9.

PC Atlas—A flexible atlas with customization features. Contains EGA and CGA modes. Files WORLDX.ARC and WORLDX.DOC in Data Library 9.

INVESTORS' FORUM

(GO INVFORUM)

The Market Game—*Stock Shock*, a shareware stock simulation game for IBM PCs and compatible systems. Allows trading of stocks for one to 12

players using a list of 30 stocks in the exchange. Game can last from one trading day to 180 trading days. Game saves for replay later. Graphics are provided for display of financial status. File STKSHK.ARC in Data Library 1.

Fund Tracker—IN-FIDELITY, a shareware program that retrieves and stores mutual fund data for your Fidelity Mutual Investment Fund. Uses Fidelity's toll-free telephone service. Keeps records of mutual fund prices and values. File INFID2.ARC in Data Library 5.

MAUG APPLE II/III FORUM

(GO APPLE)

Multi-Utility—TEX, version 2.01, freeware types, appends, deletes, renames, strips linefeeds and has a carriage return remover. Requires Apple IIe, IIc or IIgs. File TEX.EXE or TEX.BNY in Data Library 1.

Apple BBS—The Magic City Micro (MCM) BBS, version 4.0.5, features multiple bulletin boards, electronic mail, XMODEM and more. Requires Apple II Plus, IIe or IIgs. File MCMBBS.BNY or MCMBBS.BQY (squeezed version) in Data Library 10.

MAUG MAC USERS FORUM

(GO MACUS)

Medieval Game—*TILT: The Game of Medieval Jousting*, a shareware HyperCard stack that requires the HyperCard program to run. Full professional graphics and complete mouse control of all options. Requires tactical thinking. File TILT.PIT in Data Library 8.

Poison Chart—A poison treatment chart in HyperCard format. The demo allows you to locate a poisonous substance and its treatment. File POISON.PIT in Data Library 8.

Mac BBS—The WWIV BBS for the Macintosh. Description of the BBS in a file called WWIV.TXT in Data Library 14. Files containing the BBS are WWIV1.PIT, WWIV2.PIT and WWIV3.PIT in Data Library 14.

MILITARY VETERANS FORUM

(GO VETSIG)

Thrice a Soldier—Transcript won a Veterans Forum conference with a soldier who has fought for the US army, the Rhodesian army and the Canadian army. FILE RHODES.TXT in Data Library 7.

David Peyton co-authored How to Get the Most Out of CompuServe and Advanced CompuServe for IBM PC Power Users. His CompuServe User ID number is 76703,244.

Genoa SuperEGA Board:***Not Just Another EGA Adapter***

Genoa Systems Corp.
73 E. Trimble Rd.
San Jose, CA 95131
408/432-9090

Computers: IBM PC, PC-XT, PC-AT and compatibles.

Operating System: PC-DOS or MS-DOS version 2.0 or later.

Media: Software supplied on two 5.25-inch diskettes.

Copy Protection: None.

Other Requirements: High-resolution, multi-frequency monitor required to use all available video modes.

System used for test: Genoa SuperEGA HiRes Video Adapter 4850-5 installed in 2MB AST Premium/286 computer with 80287 coprocessor, Sony Multiscan monitor, 80MB hard disk and Logimouse C7 mouse; running MS-DOS 3.2.

List Price: \$599

Reviewed by Hardin Brothers

The Genoa SuperEGA HiRes video adapter duplicates the functions of the IBM Monochrome Display Adapter, IBM Color Graphics Adapter, IBM Enhanced Graphics Adapter and Hercules Monochrome Graphics Card. It claims complete compatibility with each, down to the register level, meaning it should work even with programs that manipulate the hardware directly. As far as I can determine, that claim is correct.

The GSHR is more than a conglomeration of four popular adapters, however. It has a total of 43 video modes, many providing higher resolution graphics and more on-screen textual data than any card it emulates. To use the most advanced modes, a high-resolution monitor is necessary.

The GSHR can display both monochrome and color text either 80 or 132 columns wide by 25, 29, 32 or 44 lines deep on a standard EGA-compatible monitor.

With a high-resolution monitor, it can display text in 80-by-60, 80-by-66, 94-by-29, 100-by-75 and 114-by-60 formats. I found having 7,500 characters on the screen both impressive and slightly bewildering. The characters are small, of course, but legible. For desktop publishing or large spreadsheets, the 100-by-75 and 80-by-66 modes are excellent; for many other applications, lower resolution modes are easier to read and therefore preferable.

In graphics terms, advanced modes

translate into 640-by-480, 640-by-528, 752-by-410, 800-by-600 and 912-by-480 dots on the screen. The highest resolution possible with IBM's EGA card is 640-by-350.

The GSHR also supports "double-scan" 40-by-25 and 80-by-25 CGA displays. With double-scanning, individual character dots and the dark lines between them seem to disappear completely. Both graphics and text-based displays are much improved with double-scanning.

To support all its modes, the GSHR includes a mode-switch program and special drivers for AutoCAD, GEM, Windows, Lotus 1-2-3, Framework II and Ventura Publisher. The mode-switch program can be run either from menus or directly from the command line. It also can set the board to reboot in MDA, CGA or EGA mode for self-booting games.

A 22-page booklet explains how to install the board and set its DIP switches, while a set of stapled pages explains the application drivers and how to use advanced modes with other application programs. The documentation generally is clear and satisfactory.

I'm pleased with the board, but less so with the software. If run from menus, that software is agreeable. Four overlapped windows, selectable with function keys, show the modes available, and a cursor bar selects among them. A full-screen display in the new mode appears for every mode change, giving you the option of accepting it or returning to the menus.

Run from the command line or a batch file, the program is somewhat awkward. The same mode-display screen appears, and you must press a key to continue. If your mode change implies changing monitors, say from a monochrome to an EGA monitor, you must press a key a second time. Genoa's suggested solution to this awkwardness is to create a file containing two carriage returns and have it press the keys for you.

I'm unimpressed with Genoa's customer support. I called three times to ask for programming information so I could use the advanced modes in my own programs. Twice I was promised a return call, but got none. The third time, I was told I would have to sign a non-disclosure agreement before being given any technical information and that the agreement would be sent immediately. Three weeks later, I learned that a programmer's manual is available to anyone for special purchase. The

manual, which I eventually received, assumes familiarity with standard EGA programming and should be considered a supplement to IBM's EGA documentation.

The GSHR's speed varies greatly from one mode to another. I ran a benchmark program that measures video access time and also ran a complex business graphics package in each mode. I then duplicated the tests with a CGA card, an MDA card and the Paradise AutoSwitch EGA card. In MDA, CGA and EGA modes, both the Genoa and Paradise boards run about 40 percent slower than a plain CGA or MDA adapter. However, the GSHR runs up to 50 percent faster than the older cards in its high-resolution modes. It seems strange that Genoa apparently slowed down its card in lower-resolution modes.

Despite these criticisms, I like the Genoa board. The high-resolution modes add pizzazz to my own programs, and the flexibility of switching between monochrome, Hercules, color and EGA displays without opening the computer makes my work much easier.

Hardin Brothers is an associate editor of 80 Micro and a frequent contributor to several other magazines. He is also forum administrator of CompuServe's Writers' and Editors' Special Interest Group (GO WESIG).

Trademarks: AutoCAD (Autodesk Inc.); AutoSwitch (Paradise Systems); Framework II (Ashton-Tate); GEM (Digital Research Inc.); Hercules Graphics Card (Hercules Computer Technology); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Logimouse C7 (Logitech Inc.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MS-DOS and Windows (Microsoft Corp.); Multiscan (Sony Corp.); Premium/286 (AST Research Inc.); SuperEGA HiRes (Genoa Systems Inc.).

GO OLI or circle 14 on the Reader Service Form.

Electronic Edition Hardware Reviews

The following hardware reviews are available this month in *Online Today Electronic Edition* by typing GO OLT-220 at any CompuServe Information Service prompt.

Tandy Color Computer 3

Manufacturer: Radio Shack Div. of Tandy Corp.

Computer: Color Computer 3 running OS-9 operating system.

KickStart Eliminator and About Time Amiga Enhancements

Manufacturers: Creative Micro-Systems, Inc., and ELWIII Enterprises.
Computer: Commodore Amiga A1000.

Super Modem™ 2400 Only \$199.95 each

3 lot \$196.95, 6 lot \$194.95, 12 lot \$189.95

The Communications Electronics Super Modem 2400 will send and receive full duplex data at 2,400, 1,200, 600 and 300 bits per second over your regular telephone line for only \$199.95 each. (Order # SM2400-PA)

Communications Electronics Super Modem 2400 can operate 2,400, 1,200, 600, 300 bps full duplex or half duplex over your regular voice grade telephone line. At 2,400 bps they are sync/async, over the switched network; CCITT V.22bis compatible. At 1,200 bps they are also sync/async over the switched network and are switchable between Bell 212 or CCITT V.22/V.23 compatibility. At 600 and 300 bps they are async over the switched network. At 600 bps they are CCITT, V.23 compatible and at 300 bps they are Bell 103 and CCITT V.21 compatible. The CCITT V.22 and V.23 compatibility makes these modems suitable for use worldwide.

The Super Modem 2400 automatically adjusts itself to match terminal's (or computer's) baud rate, parity and stop bits. The default setting is CCITT 2,400 bps but all parameters can be changed in the modem's non-volatile memory by using the extended "AT" command set. 11 status LED's are provided: Auto answer, off hook, high speed, DSR, RTS, DCD, TD, RD, RI, CTS and DTR. Switches are provided for constant carrier, holding DTR high, crossing pins 2 and 3, 11 bit characters and auto answer.

The modem is fully compatible with the Hayes® "AT" command set at all speeds and uses the new Hayes® 2400 commands for synchronous operation making the Super Modem 2400 compatible with virtually all IBM PC communications software. An internal speaker with software selectable volume is included. The Super Modem 2400 has an on-line help screen which shows communication parameters.

Super Modem 2400 Specifications

OPERATION: Full duplex sync or async on 2 wires

DATA RATES: Synchronous 2400 bps or 1200 bps; asynchronous 2400, 1200, 600 or 300 bps.

MODULATION: FSK and PSK

CHARACTER FORMAT (ASYNC): 10 or 11 bits including start and stop bits

EQUALIZATION: Automatic adaptive

DIAGNOSTICS: Self test, local and remote analog and digital loopback

DCE interface (stand alone models) EIA RS232C

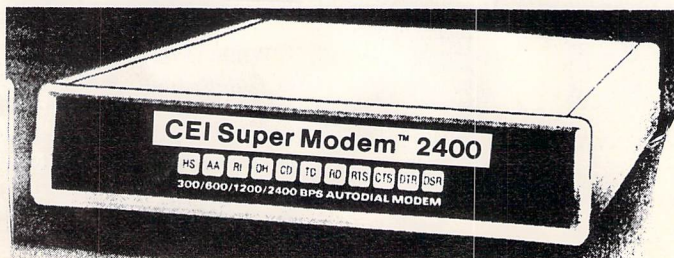
VF interface 10 foot cable with RJ-11 jack. FCC approved

DIMENSIONS: 8½" x 6¼" x 1½" - weight 1.5 lbs. (0.69 Kg.)

Hayes is a registered trade mark of Hayes Microcomputer Products Inc.

Order your Super Modem 2400 today.

5
year
warranty



Super Disk Diskettes

Super Disk™ celebrates their anniversary with super special pricing on Super Disk brand 100% certified error-free and drop-out free computer diskettes. Stock up now at these super special prices. Order only in multiples of 100 diskettes.

SAVE ON SUPER DISK™ DISKETTES		Super Disk price per disc (\$)
Product Description	Part #	
5¼" SSDD Soft Sector w/Hub Ring Retail 10 pack	6431-PA	0.39
5¼" Same as above, but bulk pack w/o envelope	6437-PA	0.29
5¼" SSDD Soft Sector w/Hub Ring Retail 10 pack	6481-PA	0.43
5¼" Same as above, but bulk pack w/o envelope	6487-PA	0.33
5¼" DSDD Soft Sector w/Hub Ring Retail 10 pack	6491-PA	0.47
5¼" Same as above, but bulk pack w/o envelope	6497-PA	0.37
5¼" DSHD for IBM PC/AT - bulk pack	6887-PA	1.29
3½" SSDD (135 TPI) - bulk pack	6317-PA	1.09
3½" DSHD (135 TPI) - bulk pack	6327-PA	1.19
5¼" Tyvek® diskette envelopes - 100 pack	AV5-PA	5.00

SSDD = Single Sided Single Density, SSDD = Single Sided Double Density, DSDD = Double Sided Double Density, DSDD = Double Sided Quad Density, SSSD = Single Sided High Density, DSHD = Double Sided High Density

Credit card orders call

800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.

P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Diskettes 25¢ ea.

CEI now offers a once in a lifetime offer on 100% certified and error-free 5¼" single sided double density diskettes for only 25¢ each in multiples of 500 diskettes. If you want double sided double density diskettes these are only 27¢ each in multiples of 500 disks. Write protect labels included. Available only in multiples of 500 diskettes. Since quantities are limited, stock up now.

5¼" SSDD MAX1D-PA \$0.25 each

5¼" DSDD MAX2D-PA \$0.27 each

5¼" Tyvek® envelopes - 100 pack AV5-PA... \$5.00 pk.

BIG SAVINGS!

Credit card orders call

800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.

P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

How to order

To get the fastest delivery of your diskettes or modems, phone your order directly to our order desk and charge it to your credit card. Written purchase orders are accepted from approved government agencies and most well rated firms at a 10% surcharge for net 10 billing. For maximum savings, your order should be prepaid. All sales are subject to availability, acceptance and verification. All sales are final. All prices are in U.S. dollars. Prices, terms and specifications are subject to change without notice. No rainchecks on out of stock items. Not responsible for typographical errors. A \$5.00 additional handling fee will be charged for all orders with a merchandise total under \$50.00. All shipments are F.O.B. CEI warehouse in Ann Arbor, Michigan. No COD's. Non-certified checks require 3 weeks bank clearance. Michigan residents add 4% sales tax or supply your tax ID number and reason for tax exemption.

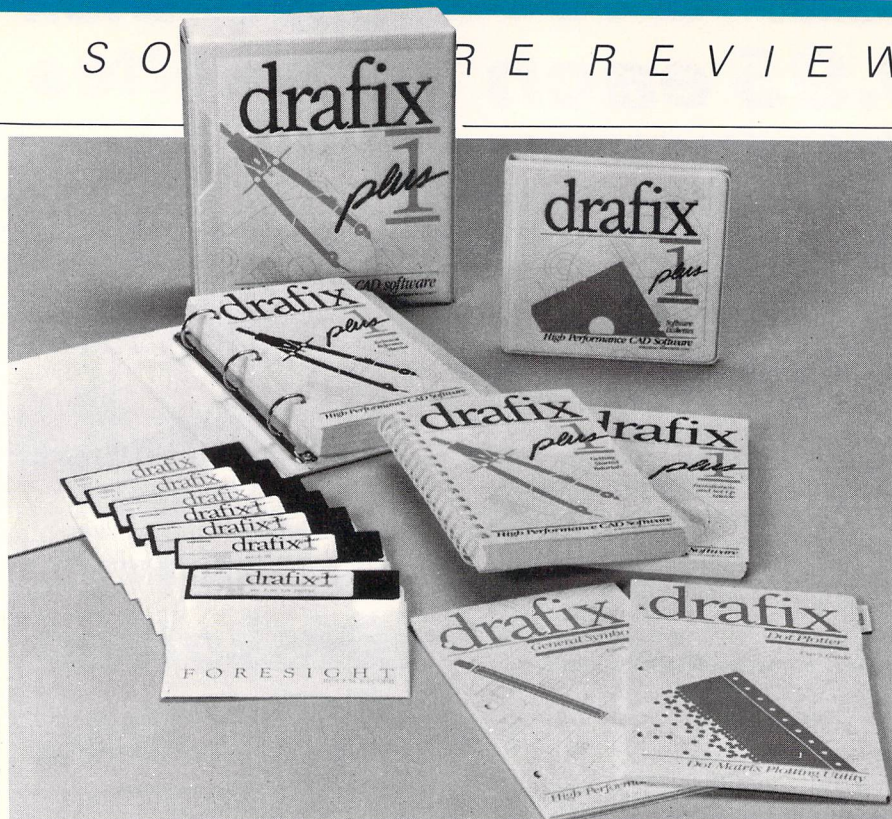
For shipping charges add \$6.00 per 100 diskettes and/or any fraction of 100 5¼-inch or 3½-inch diskettes. Add \$7.00 per modem. Add \$1.00 per data cartridge or head cleaning kit for U.P.S. ground shipping and handling in the continental U.S. For Canada, Puerto Rico, Hawaii, Alaska, or APO/FPO delivery, shipping is three times the continental U.S. rate.

Mail orders to: Communications Electronics Inc., Box 1045, Ann Arbor, Michigan 48106-1045 U.S.A. If you have a Discover, Visa or Master Card, you may call and place a credit card order. Order toll-free in the U.S. Dial 800-USA-DISK. In Canada, order toll-free by calling 800-CA1-DISK. If you are outside the U.S. or in Michigan dial 313-973-8888. Telex anytime 671-0155 (6710155 CE UW). Order from CEI today.

Copyright © 1987 CEI

Ad #071187-KA

GO OLI or circle 15 on the Reader Service Form.



Drafix 1 Plus

Enhances Affordable, High-Performance CAD

Foresight Resources Corp.
932 Massachusetts
Lawrence, KS 66044
913/841-1121 or 800/231-8574

Computers: IBM PC, PC-XT, PC-AT, PS/2 and most MS-DOS compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.1 or higher.

Media: Needs two double-sided diskette drives as practical minimum; hard disk recommended.

Copy Protection: None.

Required Peripherals: Color or monochrome monitor with video card (supports numerous color and monochrome cards); tablet or mouse pointing device (supports numerous brands and models of tablets and mice).

Other Requirements: Minimum 512K RAM (640K recommended).

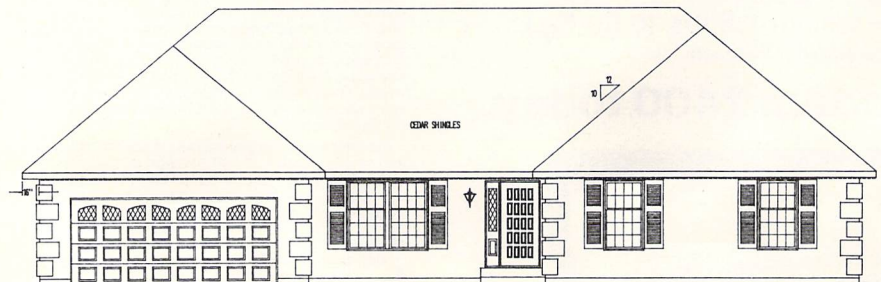
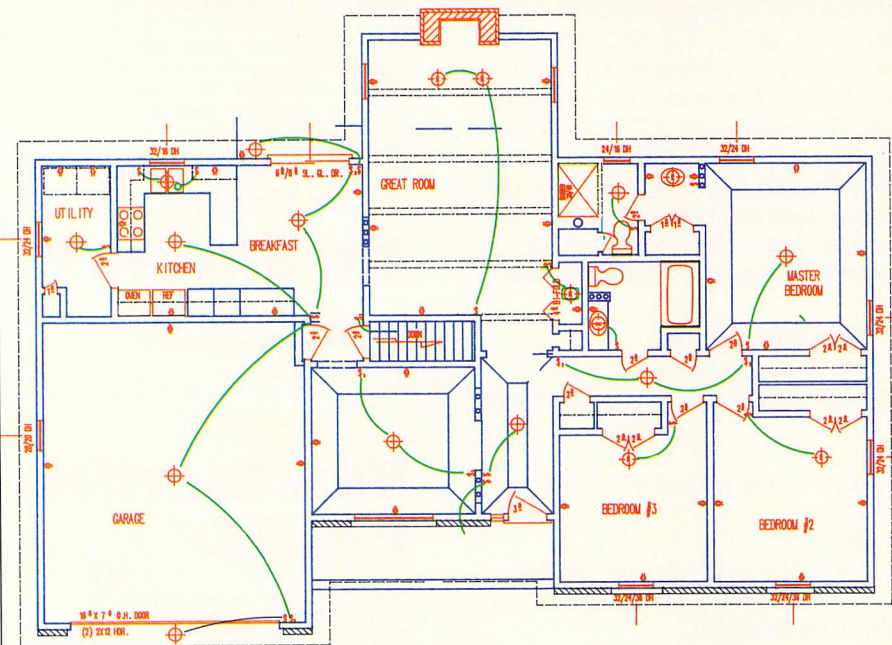
Optional Items: Math coprocessor recommended; dot-matrix printer or plotter (numerous brands and models supported).

Systems used for test: (1) 1024K Proteus 286GT with two diskette drives, 20MB hard disk, dual 15MB Sysgen DuraPak drives, 10MHz 80287 math coprocessor, 256K STB Systems EGA Plus video adapter, Amdek Color 722 EGA monitor and Torrington Manager Mouse; running IBM PC-DOS 3.1 at 12MHz. (2) 640K Compaq Deskpro with two diskette drives, dual 10MB IOMEGA Bernoulli Box drives, 8087/2 math coprocessor, Video-7 Vega Deluxe video adapter, NEC MultiSync monitor and Maynard Mouse; running Compaq MS-DOS 3.1 at 7.44MHz. (3) Computers share Epson FX-85 printer and Hewlett-Packard 7475A plotter.

List Prices: \$295 for Drafix 1 Plus (\$195 for non-Plus version); \$150 each for Architectural, Electronic or Mechanical symbol libraries; \$95 for DXF interchange utility; \$150 for "large plot" option (D and E size drawings).

Reviewed by Ernest E. Mau

While reviewing Drafix 1 version 1.0 for *Online Today's* March 1987 electronic edition, I admired its high-powered capabilities, unusual but functional user interface, extensive features and excellent documentation. It seemed practical for many CAD users who



FRONT ELEVATION
SCALE 1/4" = 1'-0"

could grow into, not out of, Drafix. Now, Drafix 1 Plus improves things by bundling additional functions and upgrading the core program to version 2.0.

As before, Drafix supports sophisticated planar drawing and editing functions and provides several methods for arcs and circles; parallel lines with corner trimming; offset arcs, circles and lines; and handy trimming functions with options for breaks, channels, edges, corners, divisions, bevels (chamfers) and rounds (fillets). It provides ellipses, polygons with up to 32 sides, filled or open shapes, polyline shapes, 23 point markers such as arrows and line crossovers, and 15 hatching patterns for materials such as iron and brass.

The new version still handles eight line types, 16 colors and 256 layers, but now has 16 text fonts instead of 12. Cursor positioning aids include absolute, relative and polar coordinates plus snapping to grid points, intersections, endpoints, midpoints or arc centers or onto items.

Item modifications quickly alter layers, colors, line types, text fonts and other attributes. Mirroring, copying, moving, rotating and scaling are efficient and effective. Useful "grouping" functions include path tracing and make regular or irregular polyline shapes from discrete items.

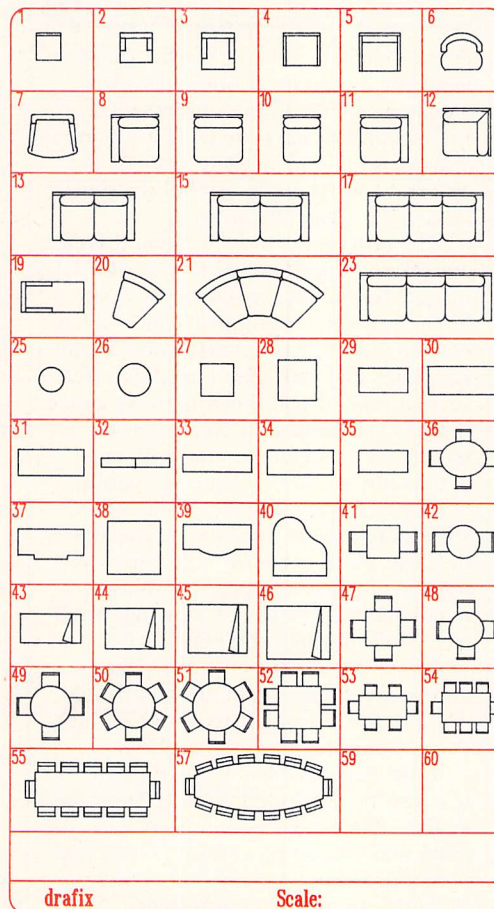
Automatic line and arc dimension functions are among the most versatile I've seen, and the number of options and controls is almost overwhelming. Not only does Drafix 1 handle English and metric units, but it also accommodates many dimension design styles and notations.

Virtually infinite zooming uses several methods and is made efficient by being able to recall the last zoom or pan across drawing areas. The number of savable drawing "views" has been doubled from eight to 16. Such views can be printed by the DotPlotter facility or displayed but cannot be sent to a pen plotter.

Aside from plotting only whole drawings, plotter functions are extremely versatile, right down to controlling color mapping, size and velocity for each pen. Pauses for pen or turret changes are provided, and Drafix even reads corner points from plotters for fitting and scaling. But scaling is risky on slow computers with a plotter interfaced at the recommended 9600 baud.

The corner reading operation sometimes fails, locking the program and computer so that cycling power is required. Slower plotter interfacing at 1200 or 2400 baud solves that problem without degrading plotting speed.

A notable addition to version 2.0 is a pop-up text editor that simplifies creating and revising drawing notes and



labels. Incidentally, notes can be left, right or center justified and aligned in any direction.

Function-key macros have been added, with 10 already defined and 20 more waiting for user definitions. A smoothing function now makes fitted "splines" and enhances shapes made of many sections. New freehand sketching draws odd items not readily created by other functions. A "slant" capability for copying or moving items now can distort drawing elements by a defined slant or an isometric skew.

A new ASCII import and export utility (DFXPORT.EXE) supposedly is for interfacing with other drawing databases or third-party software, but I found no documentation for it, and its files don't look familiar. There is still no ability to read or write HPGL files

for use with programs not supporting DXF drawing exchange.

The "Plus" in "Drafix 1 Plus" refers to bundling a DotPlotter utility and a general symbol library with the package. DotPlotter drives various printers, outputting whole drawings or stored views with user control over orientation and scaling. However, choosing printout density must be done before loading the utility, which is documented only in a disk file.

The general library's 450 pre-drawn symbols are just teasers; there aren't enough of any one type. But they give a preview of the extra-cost professional libraries. I've used the architectural (800 symbols) and mechanical (1,500 symbols) libraries. While not comprehensive, they're extensive and easy to use given care in scaling drawings and symbols.

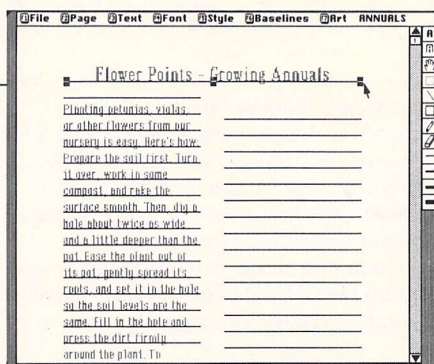
OTTO, the AutoCAD DXF exchange utility, also costs extra. It is smooth and clean running for AutoCAD drawings and does well moving DXF drawings to and from programs such as FastCAD and Dynaperspective. However, I did see some DXF files from such programs that wouldn't convert and left me with zero-length files, though I don't know why.

Given its capabilities and features, generally good documentation, superb tutorial and broad hardware support, Drafix 1 Plus is "a tremendous value," as the developer claims. While I'd still like to see more speed squeezed from it and some real isometric grids and drawing aids, I find no calamitous faults and heartily recommend it.

Ernest E. Mau, a full-time, free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.

Trademarks: AutoCAD (Autodesk Inc.); Compaq and Deskpro (Compaq Computer Corp.); Drafix and OTTO (Foresight Resources Corp.); DuraPak (Sysgen Inc.); Dynaperspective (Dynaware Corp. of Japan); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); FastCAD (Evolution Computing); HPGL (Hewlett-Packard Corp.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); IOMEGA and Bernoulli Box (IOMEGA Corp.); Manager Mouse (The Torrington Co.); MS-DOS (Microsoft Inc.); MultiSync (Nippon Electric Corp.); Proteus 286GT (Wintech Data Products Corp.); Vega Deluxe (Video-7 Inc.).

GO OLI or circle 16 on the Reader Service Form.



First Publisher:

Inexpensive Desktop Publisher

Software Publishing Corp.
1901 Landings Dr.
Mountain View, CA 94039-7210
415/962-9002 or 800/255-5550

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires two diskette drives or one diskette drive and a hard disk.

Copy Protection: None.

Required Peripherals: IBM Monochrome, IBM CGA, IBM EGA or Hercules graphics card with monitor; dot-matrix or laser printer.

Other Requirements: Minimum 512K RAM.

Optional Items: Program supports use of a mouse.

System used for test: 512K Victor V286 with one diskette drive, 20MB hard disk, EGA color monitor and Apple LaserWriter.

List Price: \$99 (introductory price); \$129 for optional Art Library.

Reviewed by Franklyn Jones

Desktop publishing conjures images of laser printers, IBM PC-AT computers, hard disks, high-resolution monitors and expensive page design software. You might easily spend \$10,000 for a sophisticated system. But what if you want only simple newsletters, forms or reports?

Good news! First Publisher lets you prepare those publications with your existing IBM PC and dot-matrix printer. Considering its low price, I wasn't expecting much, so I was delightfully surprised by what it offered.

Only one of four distribution diskettes is required to run the program, and hard disk installation is easy. The only setup involves selecting a printer driver and copying appropriate fonts, so you can be running within 10 minutes.

Once loaded, First Publisher uses the same desktop metaphor as the Apple Macintosh, with pull-down

menus and selectable icons for freehand art. It can be controlled with a mouse or cursor keys. Unfortunately, First Publisher isn't the fastest program around, so you also get to stare at the on-screen wristwatch symbol that infuriates many Macintosh users.

The program is mostly menu driven, but offers "speed keys" (e.g., [ALT-E] to exit) to perform many of the tasks. Menu options are grouped under seven headings: File, Page, Text, Font, Style, Baselines and Art. Each heading offers several related pull-down options. Since there is no online help facility, it is important to memorize certain commands not available as menu options.

For example, to select "side tools" such as the icons used for freehand art, first use F9 to cycle through side tool options. Assuming you wish to use the pencil icon for freehand drawing, press [ALT-F9] to select the pencil's line width, and icons for both the pencil and selected line width are highlighted. The process is similar to Apple's MacPaint, but a mouse isn't required.

First Publisher has its own editor, so text can be generated directly from the keyboard or imported via an ASCII file from many word processors. Once text is in place, First Publisher is ready to mold it into a visual masterpiece. Since the program takes a what-you-see-is-what-you-get approach, you can be sure your printer will duplicate your screen.

You can start a page design by reorganizing text into multiple columns, leaving room for a major headline, subheadings and perhaps some artwork. First Publisher's Baseline options take care of all formatting. Because subheadings will likely require larger type than body copy, you'll need to use vertical "leading" to add space between lines. After that is complete, you can assign fonts, styles and sizes to your publication. The printer being used determines the fonts available. Incidentally, First Publisher supports nearly all major laser and dot-matrix printers, including Apple's LaserWriter, Hewlett-Packard's LaserJet and most PostScript devices.

There are three ways to integrate artwork. One is to create artwork yourself, store it as an ".ART" file and import it whenever you need it. The second is to use the optional clip-art library available from Software Publishing. It includes several dozen graphic elements appropriate for business or personal use. The third option is to use First Publisher's "snapshot" feature to capture screens from other programs and store them as readable ".ART" files.

Aside from what has already been mentioned, there are many ways to fine-tune formatting and overall appearance. You can easily create borders, lines and boxes; run text around artwork; justify text; and modify artwork pixel by pixel. You also can view a scaled down representation of a complete page before it is printed to make sure all elements are in proper places. And you can save page designs as templates for future pages, reducing production time on subsequent projects.

However, there are some less endearing qualities as expected of a low-end program. First Publisher is slow, even with a hard disk and an 80286-based system. Cursor control also is a problem when you're not using a mouse. When you use the Arrow keys, cursor speed sometimes jumps from slow to fast without warning, which makes detailed line drawing difficult. Finally, there are no horizontal leading or kerning capabilities, which means no control over character spacing within words.

Documentation is excellent as far as it goes, but there could have been further explanation in certain areas. The key to proficiency is to spend some time trying to understand the product's methods. Don't get me wrong. First Publisher is easy to use and doesn't require any graphic design knowledge. But a working knowledge of the program's design processes will save hours of frustration.

Nevertheless, First Publisher is fun and works well. You're not likely to find a better product for the price.

Franklyn Jones was formerly the managing editor of Interface Age magazine and editor-in-chief of IBM PC Update magazine. He has written articles for various computer publications, is a regular contributor to Online Today and serves as a marketing and communications consultant.

Trademarks: Apple, Laserwriter, Macintosh and MacPaint (Apple Computer Inc.); First Publisher (Software Publishing Corp.); LaserJet (Hewlett-Packard Corp.); PostScript (Adobe Systems Inc.).

GO OLI or circle 18 on the Reader Service Form.

PFS:Professional Write:*Sleek Word Processor*

Software Publishing Corp.
1901 Landings Dr.
P.O. Box 7210
Mountain View, CA 94039-7210
415/962-8910

Computers: IBM PC, PC-XT, PC-AT and compatibles; AT&T 6300; Compaq Portable and Portable Plus; Epson Equity I, II and III; Leading Edge D and MH; Panasonic Partner Models; Olivetti M24; Tandy 1000, 1200HD and 3000; Zenith Z-158, Z-171 and Z-200.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires two diskette drives or one diskette drive and a hard disk; 3.5-inch disk format available no extra charge.

Copy Protection: None.

Required Peripherals: None.

Other Requirements: Minimum 320K RAM; DOS 3.2 requires additional 64K.

Optional Item: Printer.

System used for test: 640K IBM PC-XT with two diskette drives, Maynard 20MB hard disk, Hercules Graphics Card Plus and Okidata Microline 84 printer; running PC-DOS 3.1.

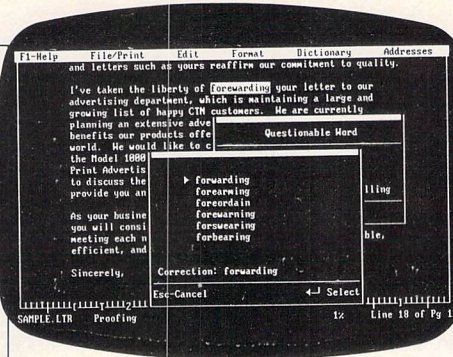
List Price: \$199

Reviewed by William J. Lynott

It has been interesting to see the increasing sophistication in word processors over the past few years. Powerful features found only in the highest priced packages just three years ago now are in many modestly priced programs. PFS:Professional Write (version 1.0) is an excellent example.

PFS:Professional Write can't be considered a state-of-the-art package like Microsoft Word or WordPerfect. It doesn't have automatic columnar formats, index and table of contents generation or some other super sophisticated features sported by the big guns. What it does have is an impressive list of advanced features capable of serving all but the most demanding technical or professional writers—all for a modest price.

A few features aren't found in some of the most expensive word processors. File encryption is an example. You may encrypt any file with a password of your choice to prevent unauthorized persons from reading it. Once you've done that, nobody, including you, gets



to see that file without having the password. If you forget the password after encrypting a file, you won't be able to load it into PFS:Professional Write.

Among the program's major advantages is a sleek combination of ease-of-use and powerful features. It is so easy that anyone with computer experience should be able to use the basic features after a five-minute romp through the manual.

The main menu is simplicity itself and offers three choices: Create/Edit, Setup and Exit to DOS. Setup is used only when the hardware configuration changes.

Once you choose Create/Edit, a series of pull-down menus and context-sensitive help screens becomes available. They make it possible to noodle out just about any task without much reference to the instruction book. Of course, the printed manual is there when you need it. It is beautifully printed and well organized. Advanced users can bypass menus with fast direct commands.

PFS:Professional Write comes on one program diskette and a dictionary diskette. You can use it on floppy drives, but a hard disk shows off the surprising speed of most everyday functions.

Cursor movement has the precision and speed that one could only dream about a few years ago. Using Home, End and Arrow keys, you can zip around a long document in the blink of an eye. Single keystrokes jump quickly to the end of a line, beginning of a line or beginning or end of a document. Another moves one complete word at a time.

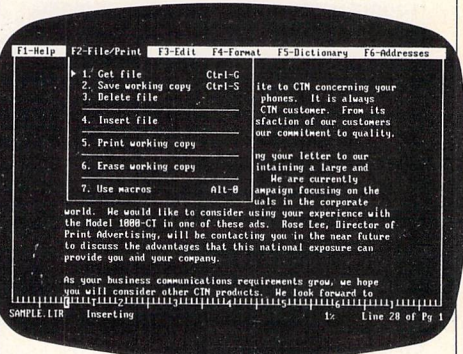
The list of standard and deluxe features in PFS: Professional Write is too long to cover here. All the usual things you'd expect are there. Automatic paragraph reformatting, easily changeable margins, tabs and other formatting options are there and are easy to use. The list of supported printers and customizing options is so long that it is safe to say virtually any popular printer

will work with PFS:Professional Write.

An "address book" lets you store up to 256 names and addresses for printing on envelopes or merging with form letters.

The spelling dictionary and thesaurus are integrated and easy to use, but some users may find the 77,000-word dictionary a little on the light side. Some fairly common words, including popular computer terms, that I use as a test are not included in it. Fortunately, you can add up to 5,000 words in a personal dictionary to beef it up.

There is a word-counting feature, but it lacks the slickness and speed found in most other parts of the program. Counting the words in a file requires that you enter the find-and-replace function and type in a special code (two periods). In all, five keystrokes are needed to get a word count.



I'm not fond of display screens that are unnecessarily cluttered with frames and information lines. PFS: Professional Write's screen is not only surrounded by a frame, it also has a tab/margin ruler at the bottom and a menu bar at the top. All would be good features if they could be turned off once a user feels they are no longer necessary.

Aside from these non-deadly shortcomings, PFS: Professional Write is a sleek little package that integrates beautifully with the other PFS programs from Software Publishing Corp.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007.420.

Trademarks: Hercules Graphics Card (Hercules Computer Technology); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Microsoft Word and MS-DOS (Microsoft Corp.); Okidata Microline (Okidata Div. of Oki America Inc.); PFS: Professional Write (Software Publishing Corp.); WordPerfect (WordPerfect Corp.).

GO OLI or circle 11 on the Reader Service Form.

Create A Calendar

Gets Dates Down Easily

Epyx
600 Galveston Dr.
P.O. Box 8020
Redwood City, CA 94063
415/366-0606

Computers: IBM PC, PC-XT, PC-AT and compatibles (not for PCjr); versions available for Apple II series and Commodore 64/128.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires at least one 360K diskette drive.

Copy Protection: None; copyable to diskette or hard disk.

Required Peripherals: Color or monochrome monitor with CGA, EGA, Hercules Monochrome or equivalent adapter; serial or parallel printer (supports more than a dozen popular brands and models).

Other Requirements: Minimum 256K RAM.

Optional Items: Additional diskette drives or hard disk; supplemental clip art from Graphics Scrapbook packages or other Print Shop compatible sources.

System used for test: 1,024K Proteus 286GT (PC-AT compatible) with two diskette drives, 20MB hard disk, dual 15MB Sysgen DuraPak drives, STB Systems EGA Plus video adapter, Amdek Color 722 EGA monitor and Epson FX-85 printer; running IBM PC-DOS 3.10 at 12MHz.

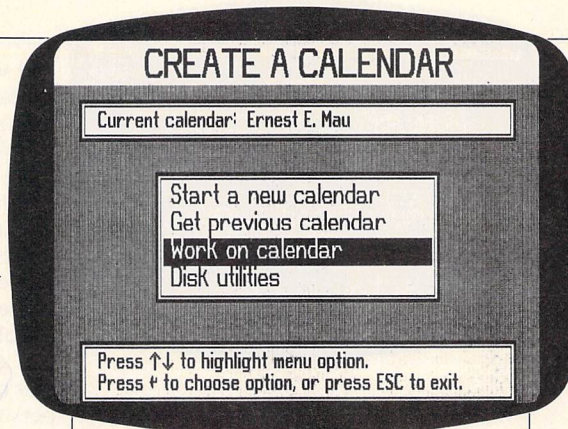
List Price: \$29.95

Reviewed by Ernest E. Mau

When Create A Calendar showed up as a candidate for review, I pushed it aside thinking it was just another frivolous program. But a week later, I needed to prepare some monthly calendars of upcoming events for a group and decided to try the program. Create A Calendar was more than I expected, and it did a respectable job within its limitations in preparing annotated and illustrated calendar pages.

This isn't a computerized "date tickler" for tracking appointments and sounding alarms that remind users when it is time to do something. Instead, it prints paper calendar pages in monthly, weekly, daily, annual or banner arrangements. It can print lists of scheduled events, but that is incidental to the other tasks.

Besides being cute and fun to play



with, Create A Calendar can be used by clubs, civic groups, service organizations, schools, retailers or anyone else needing calendars. For example, it could prepare calendars of special promotions as handouts for video stores.

If I had taken the instruction booklet at face value, I'd have run the program directly from the distribution diskette. The booklet describes using a separate diskette or hard-disk subdirectory for storing user-generated calendar files (about 102K per calendar), but doesn't mention making working copies of the program diskette. But the IBM version's program diskette is readily copyable, and the program works best when all of its files (about 328K) are on a hard disk.

Users may store various calendars under separate filenames, retrieving and editing them as needed. To start a new calendar, pick a year between 1753 and 9999 and then choose a setup. One setup creates a blank calendar without holidays or events. Another fills in preprogrammed holidays and well-known events. A third sets holidays and extra events such as Wright Brothers Day and Bill of Rights Day. A fourth inserts some obscure historical events such as the start of the California Gold Rush and Women's Equality Day. A fifth creates a calendar with Jewish observances such as Purim, Shavuot, Rosh Hashanah and the Fast of Gedalya.

When using preset forms, important days are labeled automatically with text and sometimes with graphic images. Christmas Day gets a Christmas tree, New Year's Day has a champagne bottle and Chinese New Year a dragon. Oddly, St. Patrick's Day and Flag Day don't get graphics, even though a corresponding leprechaun and flag are available.

Once a basic calendar has been created, the user may assign any of

nine type styles to annual, monthly and weekly titles and can select one of 12 border designs. The manual shows 13 border designs, but "Spooky" isn't in my copy. Beyond that, the user has day-by-day control, entering brief text and graphic illustrations for any day. Previously assigned days may be edited to change text, graphics or both. Days may be cleared, and recurring events may be repeated at intervals, such as every fifth Wednesday from April through October.

Create A Calendar has 82 graphics. The manual shows 83, but the image of a welcome mat is missing. It also can use any Print Shop graphics, including Epyx's separate Graphics Scrapbook collections. I've used both Sports and Off-The-Wall collections. Nevertheless, the program is short on graphics and has no provision for creating new ones. It doesn't even have enough to fill basic holidays and historical events, leaving Passover, Good Friday, Easter, Memorial Day and others conspicuously without illustrations.

Printouts are nicely arranged, with monthly, weekly and daily calendars containing text notations and graphics previously inserted. Annual and banner printouts are plain, without notations or graphics.

For my printer, the program supports only "high-quality" printouts. They're slow to print in that mode, so I'd have liked an alternative draft printout. Print quality is acceptable but not spectacular. Lines and text edges are more ragged than I'd like. They're usable, but I've seen better printouts from my printer.

Despite its shortage of graphics and lack of a graphic editor, Create A Calendar can be effective for those who need its particular capabilities. And the low price isn't going to break anyone's budget.

Ernest E. Mau, a full-time, free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.

Trademarks: Apple II (Apple Computer Inc.); Commodore 64 and Commodore 128 (Commodore Electronics Ltd.); DuraPak (Sysgen Inc.); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); Graphics Scrapbook (Epyx Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); Proteus 286GT (Wintech Data Products Corp.); The Print Shop (Bröderbund Software Inc.).

GO OLI or circle 19 on the Reader Service Form.

Vopt Disk Organizer

Delivers More Than It Promises

Golden Bow Systems
2870 Fifth Ave., #201
San Diego, CA 92103
619/298-9349

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

Operating Systems: PC-DOS and MS-DOS version 2.0 or higher.

Media: One diskette drive required.

Copy Protection: None.

Required Peripherals: Hard disk.

Other Requirements: Minimum 512K RAM.

Optional Items: CGA or EGA monitor with appropriate video adapter.

System used for test: 640K IBM PC with 20MB hard disk and 360K diskette drive; running PC-DOS 2.1

List Price: \$49.95

Reviewed by James Moran

Most IBM PC or compatible users know that the operating system plays tic-tac-toe with data files. When a hard disk is new, files fall naturally into place with contiguous data space being the norm. However, after the disk matures a bit, chunks of space open where old files have been deleted. Not wanting to waste space, the PC's operating system soon fills those emptied spaces helter-skelter. Unfortunately, the process fragments disk files. What once would have fit a single smooth-flowing section of disk space becomes a patchwork quilt of data sewn into any sectors that happen to be available. The non-contiguous sectors aren't just sloppy housekeeping; they slow disk accesses and computer operations.

Vopt (version 2.11) reorganizes disk space so it is contiguous and, therefore, quicker to access. The same thing can be accomplished by using the operating system's backup and restore utilities, but they take time and lots of it. Vopt reorganizes data using "best fit" algorithms through which files are not moved unless movement will result in an improvement in overall disk organization. Cosmetic moves are avoided, and the few empty clusters Vopt may leave within active files do not impair performance. Also, larger files located beyond the newly reorganized active file area aren't moved unless their current locations impair processing speed.

When examining hard disks, Vopt doesn't move files it suspects are associated with software protection schemes. It also leaves "lost" cluster

chains alone, although it can delete them automatically if an option to do so is specified at startup. However, the current copy protection scheme for Lotus 1-2-3 and Symphony is incompatible with disk reorganization. If you're using either product, be sure to de-install them before optimizing. Ah, the joys of copy protection!

My first use of Vopt required a few minutes to complete, but the disk files weren't particularly fragmented. Subsequent weekly runs were completed in just a few seconds.

When the system is using DOS 3.3 FASTOPEN, Vopt forces a system reboot on completion if the disk has been modified. This may be avoided by running Vopt before starting FASTOPEN. There are other unspecified instances where the developer says Vopt will require rebooting the system, but my uses didn't run into any such situations.

Besides the Vopt disk organizer, the developer includes several utilities on the distribution diskette.

Vcolor lets you test the effect of various combinations of foreground and background screen colors.

Vdir is a fast global file searching program that displays the date, time and path for every file or directory on your disk matching a specified pattern. The pattern may include wildcard characters. This handy utility can be used to hunt down those useless files that seem to populate subdirectories (my personal favorite is JUNK.TXT).

CHKDSK.EXE (not CHKDSK.COM) examines disk volumes greater than 32MB. It also allows volume characteristics such as cluster size and sector size to be displayed, if desired.

Other utilities can perform benchmark tests of your CPU, plot seek times for hard disks (the results on my hard disk were real shockers), display information on resident programs and examine various other disk and diskette characteristics.

Vopt and its utilities are quick and useful programs for anyone with a hard disk. They're easy to operate and understand, and for the price, they're a bargain.

James Moran is a free-lance writer and frequent contributor to Online Today. His CompuServe User ID number is 70007,2253.

Trademarks: IBM, IBM PC, PC-XT, PC-AT, PS/2 and PC-DOS (International Business Machines Corp.); Lotus, Lotus 1-2-3 and Symphony (Lotus Development Corp.); MS-DOS (Microsoft Corp.); Vopt (Golden Bow Systems Inc.).

GO OLI or circle 20 on the Reader Service Form.

800-622-0505
VIA MODEM

**THIS
NUMBER
JUST MADE
E-MAIL
EASIER TO
USE.**

Register today FREE.

List your preferred company or personal E-Mail address in the National E-Mail Registry™ — the online E-Mail phone book.

When you are listed, others can find you—even if they don't know which E-Mail service you use. And you can find others.

Act now... your listing is free, and so is the call.

Call 800-622-0505
via modem.

300/1200/2400 Baud. 7 Bit Word.

Even Parity. 1 Stop Bit.

Touch Return Three Times.

N A T I O N A L
E-Mail
R E G I S T R Y

GO OLI or circle 21 on the Reader Service Form.

Find Narrow Reject Cut Ditto Paste Jump
Save View Type In Out Zap Undo Exit

F1 for Help
10 of 16 Found

Sales Projections, Widget A

	A	B	C	D	E	F
			Jun-85	Jul-85	Aug-85	Sep-85
1						
2						
3	inquiries			120	480	1056
4	units sold			30	120	264
5	income		\$20,000	\$1,056	\$5,483	\$10,155
6						

Bob: Note the fast ramp-up, especially of inquiries. If we can keep this up we'll be moving!

Comment:

Here's part of a spreadsheet cut out of Symphony right into a MemoryMate record. The user attached some notes at the bottom, using MemoryMate's built-in word-processor.

Press the grey plus key at the right of your keyboard to see the next record

Created: 3/12/86 Modified: 5/21/87 Reminder: Ins More

MemoryMate:

Freeform Memory-Resident Tool

Bröderbund Software
17 Paul Dr.
San Rafael, CA 94903-2101
415/492-3200

Computers: IBM PC, PC-XT, PC-AT and true compatibles.

Operating System: PC-DOS or MS-DOS version 2.0 or later.

Media: Program comes on one diskette and needs one diskette drive.

Copy Protection: None.

Required Peripherals: None.

Other Requirements: 256K RAM recommended (memory-resident program occupies 82K).

Optional Items: Printer.

System used for test: 512K IBM PC with AST board, CGA video adapter, color monitor and IBM ProPrinter.

List Price: \$69.95; demonstration diskette available for \$5.95 (cost credited to purchase of full program).

Reviewed by Brian D. Monahan

MemoryMate is an easy-to-use filing program that makes extensive use of cross indexing. Unlike database managers that require predefined fields, MemoryMate instantly indexes every word typed into it and thereafter can search for any combination of words.

The program installs easily by following directions for an included "install" program. Once installed, the program is loaded into memory by typing "MEMO R" and then accessed at any time by pressing [ALT-Z].

MemoryMate comes with a 53-page manual and a double-sided reference card. Even without the manual or reference card, the program is extremely easy to use. It requires only 15 commands, and all commands remain on screen at all times. Online help is available by pressing the F1 key once in

MemoryMate. Novice users can choose them by moving the cursor to an appropriate menu choice. More experienced users can execute commands with a combination of the Control key and the command's first letter.

A brief online tutorial provides ideas for putting MemoryMate to work in practical applications.

MemoryMate is an unusual database filing system in that information can be entered in any form. For example, a name and address can be entered with the name next to the address or above it. In many ways, the program might be thought of as a database of small word processing documents. The program can store a total of two megabytes of information.

Browsing through the stored information is easy. The Plus and Minus keys at the right of the keypad enable you to page through records. Retrieving specific information is extremely quick, and the program can search 180K on a PC-XT in three seconds. Quick retrieval is accomplished by indexing every word that is entered.

It is interesting that the index attached to each word in the database is approximated, so a search occasionally retrieves a record that doesn't match the search criteria. This minor inconvenience doesn't affect the data and is well worth the search speed that is gained. Note that this will never cause you to miss a record in a search.

There are three methods of entering information into MemoryMate. It can be typed directly using a built-in text editor. It can be transferred from other programs with "ditto" and "paste" commands. And, data can be read from ASCII-text files. All three methods work well. The ability to paste in information from other programs such as Lotus 1-2-3 is especially useful.

Records can be located in various ways. They can be located by searching

for any word in the records. They can be located by searching for the date on which they were created or modified or by searching for a range of dates. In addition, dates within records can be located in the same way as text within records.

MemoryMate's Tickler feature is most interesting. You may schedule any records to appear automatically on your screen on any date you wish. Of course, using this feature assumes you'll run your computer and the program on the specified day.

One limitation users must be aware of is that the MemoryMate working disk may not be removed. If it is, MemoryMate will search for data indefinitely, which will necessitate restarting the computer with a resulting loss of data.

As memory-resident programs become commonplace, "collisions" among them become more likely. The manual claims that it makes no difference whether MemoryMate is loaded before or after other memory-resident programs. However, it does matter when some other programs are loaded. So, as the manual explains, users must experiment with the loading order for memory-resident programs. I regularly load PC Tools followed by SideKick and then can load MemoryMate without any problems.

As a company, Bröderbund gained a reputation for developing useful, reliable software. MemoryMate, which actually is an updated version of Precept's "Instant Recall," is an excellent implementation of a good idea. It lacks the sophistication of a true database manager, the power of most word processors and even the versatility of most memory-resident, pop-up programs. Nevertheless, the ability to enter data in any form and to retrieve that information quickly is such a valuable feature that I wonder why nobody did this before.

Brian D. Monahan is an associate professor and coordinator of graduate programs in the computer science department at Iona College, New Rochelle, N.Y. He also is deputy mayor of Dobbs Ferry, N.Y. Monahan's areas of interest are educational computing and the use of computers in government. His CompuServe User ID number is 70007,3000.

Trademarks: IBM, IBM PC, PC-XT, PC-AT, ProPrinter and PC-DOS (International Business Machines Inc.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MemoryMate (Bröderbund Software Inc.); MS-DOS (Microsoft Corp.); PC Tools (Central Point Software); SideKick (Borland International).

GO OLI or circle 22 on the Reader Service Form.

Zing!**Simplifies File Maintenance and Screen Printouts**

Meridian Software
P.O. Box 890408
Houston, TX 77289-0408
713/488-2144

Computer: Commodore Amiga.
Operating System: AmigaDOS and Intuition.
Media: One 3.5-inch disk drive.
Copy Protection: None.
Required Peripherals: Color monitor.
Other Requirements: KickStart 1.2.
Optional Items: Printer.
System used for test: Commodore Amiga 1000 with 1080 monitor, external disk drive and Okimate 20 printer.
Retail Price: \$79.95

Reviewed by Cheryl Peterson

Not all Amiga applications use the WorkBench environment. Some use the CLI (Command Line Interface). For those familiar with other disk operating systems, CLI resembles CP/M or MS-DOS and uses a tree directory system. Direct file manipulation is possible but inconvenient, so Zing! offers utilities that simplify file and directory creation, movement and duplication. Zing! also can print screens to disk as IFF files or to a printer. A screen dimmer activates after five minutes to help prevent "burn-in."

Zing! is a group of memory-resident utilities activated by "hot keys." Certain key combinations interrupt whatever is in progress and activate a function. While this sounds great, it is merely tolerable if used as described in the manual. All utilities aren't in memory, and some activities must access additional files. Preventing multiple disk swaps requires placing 16 Zing! files in a RAM disk or on a hard drive, which best suits "power users."

File manipulation options are excellent. A screen of filenames is displayed, and "point and click" actions designate all files to be moved, copied or deleted. Another click executes the function. A file-display option can refresh your memory of file contents, and a wonderful merge function appends multiple files.

The screen print functions also are pleasing and include a print spooler.

As one who hates DOS functions but who sometimes finds it slow to use WorkBench, I love Zing! even though the suggested price is a little steep.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Trademarks: Commodore Amiga, WorkBench, KickStart (Commodore Business Machines Inc.); CP/M (Digital Research Inc.); MS-DOS (Microsoft Corp.); Okimate (Okidata Div. of Oki America Inc.); Zing! (Meridian Software Inc.).

GO OLI or circle 23 on the Reader Service Form.

Electronic Edition Software Reviews

The following software reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

OS-9 Level 2 Operating System

Manufacturer: Radio Shack Div. of Tandy Corp.

Computer: Tandy Color Computer 3.

Cat&Mac File Finder

Manufacturer: Phenix Specialties Inc.

Computers: Apple Macintosh family.

Thunder! The Writer's Assistant

Manufacturer: Electronic Arts Inc.

Computers: Apple Macintosh family.

Amiga Paint Programs

Manufacturers: Electronic Arts and NewTek Inc.

Computer: 512K Commodore Amiga.

Headliner Jingle And Slogan Maker

Manufacturer: The Salinon Corp.

Computers: IBM compatibles.

XyWrite III Plus Word Processor

Manufacturer: XyQuest Inc.

Computers: IBM compatibles.

InfoHost Online Information System

Manufacturer: A-Comm Electronics

Computers: IBM compatibles.

In-Synch Teleconferencing System

Manufacturer: American Video Teleconferencing Corp.

Computers: IBM compatibles.

EasyLAN Software Alternative To Local Area Networks

Manufacturer: Server Technology Inc.

Computers: IBM compatibles.

The Company Books Accounting System

Manufacturer: Swiedler Information Systems

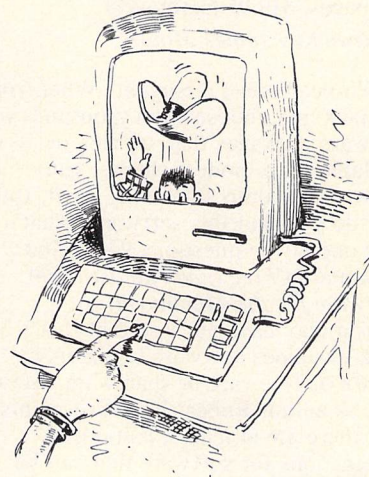
Computers: IBM compatibles.

Personal Portfolio Manager

Manufacturer: Abacus Software

Computers: IBM compatibles.

Presto!
New car
shopping is
pleasant
again.



Now, with the push of a button, AUTOVISION, via The Electronic Mall™ brings you pricing, leasing and financing information on virtually any new car.

Plus, it's all done on your PC, not the showroom floor. Just punch GO AV and say good-bye to fast talk and plaid coats forever.

AUTOVISION

THE
ELECTRONIC
MALL

The Electronic Mall is a trademark of CompuServe, Inc.

GO OLI or circle 24 on the Reader Service Form.

FREE

**(AND ALMOST FREE)
SOFTWARE
FOR THE
MACINTOSH**

UNCORRECTED PROOF

An Illustrated and Rated Guide to
Over 1,000 of the Best Programs
ROBERT C. ECKHARDT

Freeware examined: Eckhardt

Free (and Almost Free) Software for the Macintosh

By Robert C. Eckhardt
Crown Publishing Group, 1987
413 pages, \$19.95 (softcover)

Reviewed by James Moran

Who can resist a bargain? When you can pick and choose from thousands of software packages that are free or available for a modest charge, you know you're onto something good. But how do you find this software? That's only one of the questions you'll find answered in *Free (and Almost Free) Software for the Macintosh*.

You may have guessed that this book examines software commonly known as freeware or shareware. Actually, as author Robert Eckhardt points out, there are at least a half-dozen designations for software that can be legally copied.

Since no one term accurately describes the products Eckhardt writes about, he coins one of his own: public exchange. Not only can you copy such software, you can try it out first. After that, it is up to the software's author to specify any additional provisions you must satisfy for longer use. Often there are no fees, and occasionally a fee may be requested but not required. In some instances, printed manuals or an enhanced version of the software may be available for a minimal fee.

Among the criteria for including a package in this book were cost, usefulness, timeliness and the absence of special processing requirements, such as access to a programming language. Just about everything else was fair game as long as it wasn't non-essential, non-functional or redundant. Obviously, this left a lot of open territory to cover. Included in that territory—and in this book—are games, templates, utilities, desk accessories, graphics, applications, communications and just about everything in between.

Perhaps the most important chapter explains how to get the public exchange software. Just about every possibility is thoroughly covered. All references to software suppliers include the name, address and telephone number of the source plus a helpful explanation of the terms and any required fees.

Some who read the book will be surprised to discover how much software is available from the forums on CompuServe. An even better surprise for these readers is the complete and understandable explanation of how to access the forum data libraries. For those who never could understand the difference between a download and a downpour, this explanation alone may

be worth the cost of the book.

Most of the book examines specific software packages. These short studies of products are overviews rather than reviews, and the author leaves it up to the reader to make a choice. A special section—more than 100 pages—is devoted to text, display and special purpose fonts.

Within the pages of this book are descriptions of more than 1,000 of the best public exchange programs. I don't get to make sweeping statements often, but if you own a Macintosh, you need this book.

James Moran is a free-lance writer and frequent contributor to Online Today. His CompuServe User ID number is 70007.2253.

The Illustrated Handbook of Desktop Publishing and Typesetting

By Michael L. Kleper
Tab Books, 1987
770 pages, \$29.95 (softcover)
Reviewed by Michael Naver

With a shelf full of books on desktop publishing already on the market, all we needed was an encyclopedic volume covering word processing, typography, graphics and page layout programs. We have one now.

The Illustrated Handbook of Desktop Publishing and Typesetting appears to be the most comprehensive treatment of that subject to date and, at 770 pages, certainly the weightiest (five pounds). As the title promises, it is profusely illustrated with sample screens, diagrams, product photos and many examples of typeset work.

This is appropriate, since the book covers the basics of typography, word processing and typesetting methods, including about 350 pages of descriptions of current page layout programs, printers, and related hardware and software.

While many of the products discussed will naturally be supplanted by newer, better versions, this handbook is not likely to become obsolete. Its wealth of basic reference material on text and graphics production will fill a continuing need.

As a reference work, the handbook delivers. In addition to its 15 detailed chapters, it has several appendixes covering computer-to-typesetter interfaces, software, peripherals, typesetter vendors, publications, user and trade

groups, used equipment dealers and micro front-end systems. An index of illustrations covers seven pages and a separate general index is 15 pages. What the appendixes don't cover, the two indexes generally do.

In contrast, the bibliography is skimpy, less than a page in length and consisting mainly of the titles of the author's other books. This is too bad, since a list of the best desktop publishing books produced in the past year would be another valuable reference item.

Although thorough in his approach, Kleper, who is an expert in the field, can at times be arbitrary. An otherwise useful chapter on telecommunications, for example, devotes much space to certain communications software, but ignores many popular packages. Also, the reader will not find a discussion of Hayes-compatible modems, the industry standard.

On the other hand, a separate chapter provides many good examples of publishers who use typesetting services to handle the final steps of their publications. Here again, an appendix listing a selection of tele-typesetting houses around the country would have been helpful.

But these are relatively minor quibbles about a book whose overall quality is impressive. There is probably more detail here than a novice needs, but the user who is (or plans to be) heavily involved in desktop publishing and actively seeks to expand the reach of his or her system with additional software and peripherals will find it valuable.

Michael Naver of Baltimore, Md., is editor of Hi-Tech Alert for the Professional Communicator, a newsletter advising corporate communicators and public relations counselors on uses of new technology. His CompuServe ID number is 70007.621.

Lotus 1-2-3 Desktop Companion

By Greg Harvey
Sybex, 1987
976 pages, \$26.95 (hardcover)
Reviewed by Harry Green

Probably no IBM PC software has such a loyal following or has spawned such a number of books as Lotus 1-2-3, but *The Lotus 1-2-3 Desktop Companion* has to be the granddaddy of them all—not because it is the oldest, but because of its sheer bulk. With nearly 1,000 pages packed full of information, you wonder how there could be so much to write about Lotus, but this book still hasn't exhausted the possibilities.

The measure of a book isn't in its bulk but in its content, and from that standpoint this book stacks up well indeed. It isn't a beginner's book because it lacks the practice exercises obligatory in a Lotus primer. Still, it is an excellent book for a beginner because it has such a wealth of information about the program. It also contains plenty of examples, particularly of short macros that help you save keystrokes.

One of the book's outstanding features is a diagram of every menu except ones such as Move and Copy that don't have multiple commands. If you're new to Lotus, these can be helpful in plumbing its depths, which most users never reach.

The book is logically organized, with chapters grouped together in parts where they share common characteristics. For example, the functions are in such groups as financial, statistical, engineering and scientific. Database functions make up one part as do graphics and macros. Every chapter follows a similar format of starting with a short introduction followed by a narrative that describes the principal functions or commands and a description of how each command operates.

Sample screens are liberally sprinkled throughout. These are not applications; however, they are examples that may or may not have a practical use in your spreadsheets. The differences between versions 1A and 2.X are clearly explained. If you've wondered whether to upgrade, you can quickly thumb through the book and see the features that were introduced with version 2.0. The author also explains incompatibilities between the versions

and how to translate between them.

Harvey writes with a lucid style, presuming that you are neither an expert nor a dunce and giving the right amount of information for every command and function. I have never read a Lotus book without discovering something new, and this one is no exception. You can either browse through it or use it as a reference manual. It is indexed for rapid reference with the main explanatory pages listed in bold type. Separate index sections are provided for commands, functions and topics.

If you're going to purchase only one Lotus manual besides the one that came with the program, this one would be an excellent choice. There are many books of this sort on the market, but this is the most complete I've seen, and it is both clear and accurate. Besides that, you get hardcover durability at a softcover price.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007.431.

Electronic Edition Book Reviews

The following book reviews are available this month in *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

Microsoft QuickBASIC, by Douglas Hergert, Microsoft Press.

Experiencing Artificial Intelligence: An Interactive Approach for the Apple and Experiencing Artificial Intelligence: An Interactive Approach for the IBM PC, (both) by John J. Morone and Mark R. Hilbush, TAB Books Inc.

Music Through MIDI: Using MIDI to Create Your Own Electronic Music System, by Michael Boom, Microsoft Press.

Build Your Own IBM Compatible and Save a Bundle, by Aubrey Pilgrim, TAB Books Inc.

Technical Introduction to the Apple IIGS, by Apple Computer Inc., Addison Wesley Publishing Co.

- ★ Ultra-low brokerage commissions.
- ★ NO start-up charges.
- ★ NO monthly subscription charges.



Use any PC, any modem

TRIPLE SAVINGS

...when you go "on line" with Quick & Reilly, one of America's largest and strongest discount brokers

With Quick & Reilly's easy-to-use QUICK WAY on-line brokerage service...

- You can have from one to 75 trading accounts with NO start-up or monthly subscription charges.
- You also get big savings on commissions.

COMPARE	100 sh	300 sh	1000 sh
	@ 40	@ 30	@ 20
QUICK & REILLY	\$41	\$ 75	\$ 98
Charles Schwab & Co.	49	89	122
Merrill Lynch	86	193	357
E.F. Hutton	84	180	399
Dean Witter Reynolds	72	180	360

(Telephone survey 8/87)

- You can get quotes on any stock, option or market index listed in the Wall Street Journal.
- You can place orders in minutes, day or

night. Reports are sent back on-line, followed by written confirmations.

- You can monitor, on a single screen, the prices of up to 18 stocks. (You can similarly monitor options.)
- You have instant access to Standard & Poor's Reports, Value Line Data Base II, and 10 years of market data on some 50,000 securities.
- And, any time you wish, you can bypass your computer and get *personal service* from an individual Account Executive.

For complete information plus an on-line demonstration and application for QUICK WAY—type GO QWK. Or call us toll free at 800-672-7220.

Quick & Reilly, Inc.
Member NYSE, SIPC
120 Wall Street, New York, NY 10005
143

GO OLI or circle 25 on the Reader Service Form.

dBase III Plus:

Advanced Applications for Nonprogrammers

By Richard H. Baker

Tab Books, 1987

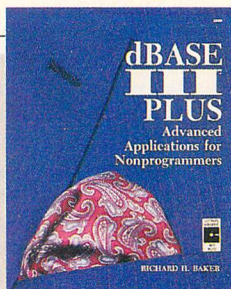
436 pages, \$19.95 (softcover)

Reviewed by William J. Lynott

When the original version of Ashton-Tate's dBase was released, it was obvious that it wasn't intended as a ready-to-use database manager. To make it work, you had to do some programming. You had to learn what to do when that intimidating little dot just sat there, staring out from the screen. To be sure, dBase was much easier to work with than most programming languages, but a new user had to figure on spending a lot of time and effort in learning how to put that powerful package to meaningful work.

Now, after several generations, we have dBase III Plus. It was worth the wait. With the addition of the Assistant (a complete pull-down menu system), most of the features of this powerful database manager and programming language are at the beck and call of most any beginner. No programming is necessary to access most of the features of the dBase system.

That is both good and bad. The program is now so easy to use that almost anyone can put it to work. Still, industry experts estimate that less than half of the people who use dBase are



Starting point: dBase III Plus

able to access the program's most advanced features. That is because they require a little programming, and programming is something that a lot of dBase users just don't want to do.

dBase III Plus: Advanced Applications for Nonprogrammers offers a relatively painless way to get over this hump. The book's 13 chapters and six appendixes will give you a lot of practical help that you won't find in the dBase users manuals.

The author's light touch is a major factor in transforming the potentially deadly topic of programming into a highly readable manual.

The book is organized into three sections: beginner, intermediate and experienced. If you are already using dBase III Plus at a basic level, you can skip Chapter 1 and move right into the intermediate section. If you are a complete beginner, you'll find Chapter 1 to be a gold mine of information on how the dBase III Plus system and database managers in general function.

Chapter 2 is the intermediate level—for folks who have been using dBase for a while.

Starting in Chapter 3, you'll enter the world of advanced applications for non-programmers. The chapters that follow cover such topics as basic database design and using dBase with other programs. Many users don't realize how easy it is to import data from word processors or spreadsheets into dBase. You'll pick up a lot of pointers on that subject here.

The final chapters contain step-by-step instructions for writing complete programs for managing human resources, inventory management, accounts payable/receivable, time management for professionals and building a business plan.

Line-by-line instructions for keying in those programs are included. For those who want to save the time necessary for keying-in and eliminate the possibility of error, all programs can be ordered on disk ready to run for a reasonable \$29.95.

dBase III Plus: Advanced Applications for Nonprogrammers has something for users of dBase at all levels except the most advanced. If you'd like to learn more about the capabilities of dBase III Plus, this book is a good place to start.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

The Insider's Guide to IBM PC Hardware and Software

By Corey Sandler

Scott, Foresman and Co., 1987

266 pages, \$19.95 (softcover)

Reviewed by James Moran

Subtitled "Advanced Tips You Won't Find in the Manual," *The Insider's Guide to IBM PC Hardware and Software* will appeal to those readers who'd like to be more sophisticated IBM PC users.

The book doesn't teach programming nor does it explain the ins and outs of computer operation. It doesn't even show you how to repair your computer (although it has some hints on diagnosis). However, it will explain more undocumented tips, procedures and instructions than you ever imagined

existed. And for PCjr owners there is a special surprise: Many of the topics in the book apply to your orphan, too.

Many of the hints in the book were discovered by author Sandler in his daily use of the IBM PC. Readers who note bylines will recognize Sandler as an editor, columnist and feature writer for a number of well-known computer magazines. His suggestions on IBM PC use are borne of constant and necessary work as a user and not as a programmer or other exotic computer professional.

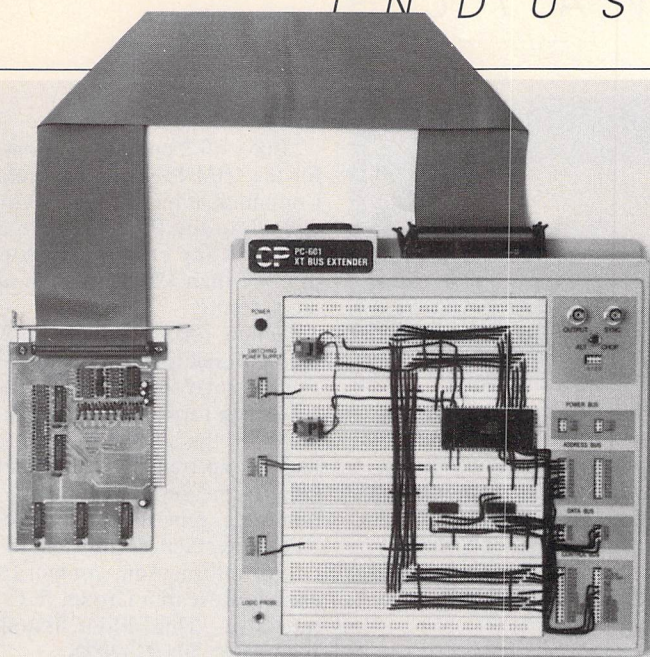
The book begins with tips on buying an IBM or compatible computer. In this section you'll find useful overviews on buffers, spoolers, RAM, turboboards and numerous other computer components. Once past the enlightening introductory chapters, you'll quickly find the meat of the book.

There are suggestions on making economical hardware additions to an

existing computer as well as ways to make what you have work better. If you're a WordStar aficionado, you'll find plenty of information on special patches and techniques, including a bit stripper. And if you follow up the ProKey hints, you'll find your word processor is better behaved than before you read this book.

There are 20 chapters of useful hints and techniques in this book. Each chapter is packed with information that would take most users a long time to discover on their own. From the hidden abilities of DOS to the latest techniques in creating spreadsheets, *The Insider's Guide* will take you on a tour of your computer and its most popular software. At the end you'll come out an expert.

James Moran is the editor of Compu-Syn, a syndicated news service that specializes in computers and robotics. His CompuServe User ID number is 70007,2253.



Bus Extender

Chenesko Products has introduced the PC-601 XT Bus Extender and Breadboard Lab for design use with IBM PC-XT computers and compatibles.

Ideal for design engineers, technicians and students, the PC-601 is used for designing, testing and troubleshooting of circuits to be used with PC-XT-style computers. The Bus Ex-

tender is comprised of a half-size buffer expansion card, which plugs into any expansion slot. The card picks up the XT Bus signals, which are then buffered and sent via a 24-inch ribbon cable to the Breadboard Lab where they are received and made readily accessible on the front panel. Retail price is \$369.95.

For information, contact Chenesko Products Inc., 21 Maple St., Centereach, NY 11720; 516/736-7977.

Dial Modem 24+

The Dial Modem 24+ from Black Box Corp. is compatible with many dial-up standards enabling the user to link up systems internationally as well as expand lines of communication.

Priced at \$549, the modem can be used with any of the popular software communications products on the market. Features include automatic adaptive equalization and selection of 2400, 1200 or 300 baud. A half-card PC version, adaptable to synchronous or asynchronous communication sells for \$499.



For information, contact Black Box Corp., P.O. Box 12800, Pittsburgh, PA 15241; 412/746-5500.

Internal Modem Server

OmniTel has introduced a new LAN and multi-user product line that is the first to offer internal modem server capabilities with up to 16 modems in a single personal computer.

The new product line, called the NetComm Series, consists of the hardware and software to convert an IBM PC-XT or PC-AT into an integrated

modem server, offering multi-users considerable cost savings in hardware and peripherals. Features include a half-sized asynchronous card, software and internal modem cards that provide access to four to 16 modems on a single board. Prices range from \$179 to \$1,799 depending on the units purchased.

For information, contact OmniTel Inc., 5415 Randall Pl., Fremont, CA 94538; 415/490-2202.

Zoom Modem

The Zoom/Modem PC 2400 HC from Zoom Telephonics is a 2400/1200/300-baud modem selling for \$199.

Compatible with the Hayes AT commands and S registers, the modem features the latest DSP technology, an onboard speaker with volume control, an audio jack for an optional external speaker, support of four COM ports and a high-speed 16450 UART bus interface for compatibility with any IBM PC, PC-XT or PC-AT compatible. Additional features include auto-dial/auto-answer, dial-tone detection, a second jack for a local phone and adaptive equalization and analog loopback diagnostics.

For information, contact Zoom Telephonics Inc., 207 South St., Boston, MA 02111; 617/423-1072.

EasyTalk 2400

Megahertz Corp. has introduced Hayes compatible 2400-baud internal modems for several laptop computers, including Toshiba's T1100 Plus and T3100.

Called the EasyTalk 2400 series, the modems include Crosstalk communications software and come with a two-year warranty. Features include automatic answer, dial, disconnect, adjust to incoming data speed, full- or half-duplex operation over dial-up phone lines and US and international compatibility. List price is \$599.

For information, contact Megahertz Corp., 2681 Parleys Way, Suite 2-102, Salt Lake City, UT 84109; 801/485-8857.

PS/2 Modem

Advanced Transducer Devices has introduced the PS/2 Zuckerboard modem, a half-card, 1200-baud internal modem for the IBM PS/2 computer.

The fully Hayes-compatible modem comes complete with PC Talk 3 software and features pulse/tone dialing, compatibility with all standard communications software and dialing, busy and call progress tone detection. It also has a speaker with programmable volume adjustment for line monitoring. Retail price is \$129.

For information, contact Advanced Transducer Devices Inc., 235 Santa Ana Ct., Sunnyvale, CA 94086; 408/720-1938.

PS/2 Bridge Products

Sysgen has introduced four external "bridge" products that transport data between the older IBM PC, PC-XT and PC-AT to the new IBM PS/2 line:

- 3½-inch Bridge-File sells for \$325 and provides a two-way link between the IBM families with 720MB and 1.44 MB of floppy disk storage.
- 5½-inch Bridge-File retails for \$325 and also connects the two PC families, providing 360K and 1.2MB of floppy disk storage.
- Bridge-Tape, priced at \$795, provides a tape unit capacity of 42MB to port data to all of IBM's old PCs and its entire new PS/2 line.
- External DuraPak, Sysgen's existing



removable hard disk subsystem, has been modified to tie into both the old PC family and the new PS/2 Model 30. Featuring 15MB of memory storage, the unit sells for \$1,595.

For information, contact Sysgen Inc., 556 Gibraltar, Milpitas, CA 95035; 408/263-4411.

Blast PS/2

Blast PS/2 communications software for the IBM PS/2 is a new release from Communications Research Group that will allow any PS/2 model to communicate with any other PS/2 system or any of more than 120 computers and operating systems.

Selling for \$250, Blast PS/2 features bidirectional format capabilities so users can go from the 5 1/4-inch to the 3 1/2-inch format or vice-versa. In addition, the software offers automatic dialing and transmission of data, script files for pre-setting frequently used functions, repetitive dialing and automatic interfacing with remote systems.

For information, contact Communications Research Group, 5615 Corporate Blvd., Third Floor, Baton Rouge, LA 70808; 504/923-0888.

1-2-3 Add-in

A new Lotus 1-2-3 add-in that allows creation of customized data entry forms for entering, viewing and editing data in 1-2-3 has been introduced by Goldata Computer Services.

Called Data Addition, Verification and Editing (or D.A.V.E.), the program allows the 1-2-3 user to create a customized data entry form or image by painting it on the screen and specifying editing criteria for each data field. Images can be 10 pages in length and can contain 256 fields. D.A.V.E. also contains a verify option that allows the user to check an existing worksheet. D.A.V.E. is priced at \$99.95 through Dec. 31, after which it will retail for \$129.95.

For information, contact Goldata Computer Services, 2 Bryn Mawr Ave., Bryn Mawr, PA 19010; 215/525-1036.

Turbo Basic Toolboxes

Borland International has introduced Turbo Basic Toolboxes for database, editor and telecommunications development for the IBM PC and compatibles.

Selling for \$99.95 each, the three packages include complete source code that can easily be incorporated into users' applications. The Turbo Basic Database Toolbox features access, sort and screen display and entry routines for database programming. The Turbo Basic Editor Toolbox comes with two text editors: First-Ed, with multi-windows, and MicroStar, with pull-down windows. The Turbo Basic Telecom Toolbox provides all routines required to build a complete communications program.

For information, contact Borland International, 4585 Scotts Valley Dr., Scotts Valley, CA 95066; 408/438-8400 or type GO BOR on CompuServe.

TheEMCEE

Command Software Systems has introduced TheEMCEE (version 2.4), the first intelligent menu-based system with security features.

Designed for the IBM PC and compatibles and PS/2 computers using DOS 3.3, TheEMCEE combines multi-level password security, advanced path-finding capabilities, a sophisticated system/user log, data encryption and online context-sensitive help into one complete package. Other features include user-definable screens, single key access to all programs, online menu editor, automatic screen blanking and auto-start capabilities. Retail price is \$69.95.

For information, contact Command Software Systems Inc., 28990 Pacific Coast Highway, Suite 208, Malibu, CA 90265; 213/457-1789.

Show Me!

Serengeti Software has introduced Show Me!, a pop-up file-viewing utility for the IBM PC family and compatibles and the IBM PS/2.

Show Me! displays the contents of WordStar documents and any other disk file in an adjustable window, which can be used to consult several documents at once and copy blocks into the current text. Available on either 5¼-inch or 3½-inch diskettes, Show Me! retails for \$39.

For information, contact Serengeti Software, P.O. Box 27254, Austin, TX 78755; 512/345-2211.

Error-Free Modem

Multi-Tech Systems has introduced an error-free 1200/300-baud modem.

Called the MultiModem212E, the desktop unit uses the MNP error-detection and retransmission protocol for transmitting data over normal communication lines. It can operate in synchronous or asynchronous modes, can be set to run with or without auto-detect MNP protocol and uses a speed conversion feature. Retail price is \$399.

For information, contact Multi-Tech Systems Inc., 82 Second Ave. S.E., New Brighton, MN 55112; 800/328-9717 or 612/631-3550.

LIMbo

LIMbo from Vericomp is a software package that provides true expanded memory capability for IBM's PS/2 Models 50 and 60.

LIMbo transforms banks of memory on IBM's 80286 Memory Expansion Option board into high speed Lotus/Intel/Microsoft (LIM) expanded memory. The program provides support for up to 8MB of expanded memory. Retail price is \$49.95.

For information, contact Vericomp, 8825 Aero Dr., Suite 210, San Diego, CA 92123; 619/277-0400.

Word Finder

Word Finder, an electronic thesaurus for the Apple Macintosh from Microlytics, offers users immediate access to a 220,000-synonym thesaurus. The new Macintosh version of Word Finder is installed as a desk accessory and can be used with the most popular Mac software, including MacWrite and Microsoft Word. To activate Word Finder, the user highlights a word and using the mouse, clicks the Word Finder selection on the Macintosh's menu bar. Synonyms are instantly displayed, and with a double click of the mouse, the chosen synonym replaces the highlighted word. Retail price is \$59.95.

For information, contact Microlytics, Techniplex, 300 Main St., East Rochester, NY 14445; 716/248-9150.

Toshiba Laptop Expansion

WonUnder from Connect Computer Co. is an innovative single card expansion unit for the Toshiba T3100 portable computer.

Selling for \$349, WonUnder allows any single expansion card to be mounted directly on the bottom of the T3100 PC. Supported cards include network interface cards, modem cards and mainframe terminal emulation cards. Future releases will include support for AT-style 16-bit cards.

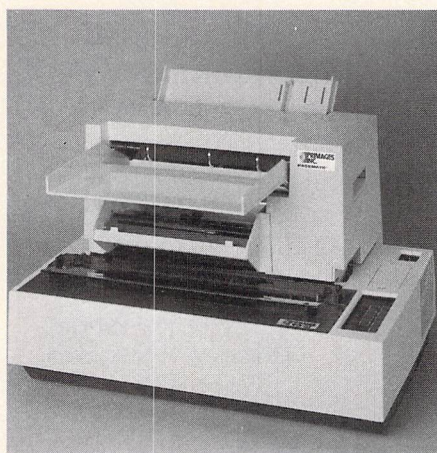
For information, contact Connect Computer Co. Inc., 9855 W. 78th St., Eden Prairie, MN 55344; 612/944-0181.

Headliner

Headliner from Salinon Corp. provides writers with text manipulation tools and a library of expressions to create effective titles, subheadings, bullets, slogans, headlines, jingles and more.

Designed for the IBM PC, PC-XT, PC-AT or compatible computers, Headliner finds and modifies clever or already popular expressions in a manner that conveys the desired message. The program contains 25 built-in lists containing more than 33,000 expressions culled from books, songs, movies, ads, proverbs, idioms, quotes and more. Retail price is \$495.

For information, contact The Salinon Corp., 7430 Greenville Ave., P.O. Box 31047, Dallas, TX 75231; 214/692-9091.



Primages Printer

Primages has introduced the Primages 90-GT, a daisywheel computer printer that combines 90 characters-per-second speed with graphics capability.

Selling for \$1,095, the Primages 90-GT incorporates a ribbon sensing system, which provides automatic sensing and shutdown of the printer should a ribbon break. A choice of 100-spoke wheels in a wide selection of type styles is offered. Bar charts and graphs, as well as technical illustrations, may be printed.

For information, contact Primages Inc., 151 Trade Zone Dr., Ronkonkoma, NY 11779; 516/585-8200.

Color Graphics Printer

Hewlett-Packard Co. has introduced the HP PaintJet color graphics printer, which produces vivid color graphics for overhead transparencies and reports with near-letter-quality, high-speed text.

Priced at \$1,395, the thermal ink-jet printer produces text and graphics with 180 by 180 dpi resolution and NLQ text at a speed of 167 cps. The device can produce a typical text page in about 40 seconds and a full page of color graphics in about four minutes. The printer holds four inks (black, yellow, magenta and cyan) and mixes these colors to produce red, blue and green. With appropriate software, the primary colors can be mixed to provide 330 different shades and hues.

For information, contact Hewlett-Packard Co., 3000 Hanover St., Palo Alto, CA 94304; 415/857-1501.

MousePouch

H&H Enterprises has introduced the MousePouch, a vinyl suede pocket that holds the computer's mouse and frequently used disks, disk labels, pens, pencils and more. It attaches with velcro to the side of a monitor or any other convenient surface.

Retailing for \$5.95, MousePouch keeps small items off the work area so they won't get lost under paperwork and manuals. Measuring 3½-inches by 3½-inches by 1¼-inch, the pouch comes in gray or tan with matching metallic trim.

For information, contact H&H Enterprises, P.O. Box 2672, Corona, CA 91718; 714/737-1376.

Electronic Edition Product Announcements

The following product announcements are available this month in *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

Holiday ClipArt, library of holiday images, Micrografx Inc.

TakeTwo Manager (version 2), automatic file backup and recovery program for the IBM PC, XT, AT, PS/2 and compatibles.

4Views, an add-in utility program that allows analysis and reporting of Lotus 1-2-3 databases to take place within 1-2-3, Turner Hall Publishing.

The Power Pole II, rechargeable power source for the TRS 80 Models 100, 102 and 200 computers, The Portable Power Co.

Verbal View, software program that enlarges the size of print on the computer monitor, Computer Conversations.

Data-P, a SideKick-style memory-resident programming utility, WallSoft Systems Inc.

drafix 1/Atari ST, CAD program for the Atari ST.

GOfer, add-on utility for high-speed text search and insertion for the IBM PC, PS/2 and compatibles, Microlytics.

The Name Processor, maintains mailing lists, ETS Center.

Computer Stationery, special line of laser-cut, continuous-feed paper with holiday designs, Computer Creations.

Direct From Our Roaster To You

C O F F E E E M P O R I U M

Purveyors of Gourmet Coffees & Teas

- Gifts for Family, Friends and Business Associates
- We offer the World's Rarest Coffee — Jamaican Blue Mountain
- Try Our Sampler Packs
- Orders shipped within 48 hours

Come Shop With Us!

GO COF

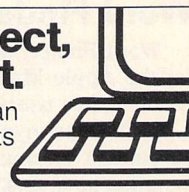
If you're looking for the lowest air fares for your summer travel, try the



Pick a subject, any subject.

List them all or scan for specific subjects

GO INDEX



Keep a tally.

Check your online charges quickly



Be a Lotto Millionaire!

New! Lotto Picker™ Plus V2.0 stores winning Lotto 6, Keno, & Pick 3/4 numbers & uses statistical analysis to give you the winning edge! All U.S. & Can. games included. V2.0 features speed boosts up to 70%, a database editor, and much more. Never Obsolete—Pays for itself! For IBM, C64/128 \$34.95 (+4.55 sh). Ridge, 170 Broadway, #201OL, New York, NY 10038. 800/634-5463 ext. 293. Info 718/317-1961.

BE AN EWT TRAVEL AGENT WITH YOUR PC

Individuals, businesses worldwide access. Save & control air/car/lodging cost\$. For complete details, call EWT 1-800-672-3274; in Illinois 1-312-295-7770. Hitech pays.

Turn Your PC/XT/AT Into Multi-User, On-Line System

INFOHOST

Multi-user On-line System Software (Reviewed by PC Week on 5/19/87)

You can now place a database on goods and services on-line using your own PC, so your customers can dial in over phone lines to access information, leave messages, and make purchases via modem. InfoHost, which can support as many as eight simultaneous modem interfaces, features a customizable relational database that can be adapted to the needs of your business.

A-Comm Electronics, Inc.

377 Route 17 South, Hasbrouck Hts., NJ 07604
201/288-7885; TLX: 4948376

Call Our Demo System at 201/288-7792

(With Modem Settings 8/1/N)

Meet Warm People

Visit HSX Support Groups
Make bright, caring friends.
Talk live. Share feelings. Grow!
A sensitive CB. **GO HSX 18**



Universal Data Systems



MOTOROLA INC.
Information Systems Group

SPECIAL BBS OFFER FOR IBM

IDEA-TREE Multi-topic system. Public/private msg. areas, file transfer, xmodem, database, more...\$99
PC-DATE Matchmaking system. Modifiable questionnaire, public/private msgs, pref. screening...\$79
BAUDCAST Message distributor for announcements, news or any text to remote receiving stations...\$59

ProtoSoft

PO Box 16756 Seattle, WA 98116
(206) 932-5310 (voice) or
(206) 932-7125 (BBS) VISA/MC

FREE CATALOG!

Inside*Outside Lingerie.
GO IO for lingerie and fragrance catalog.

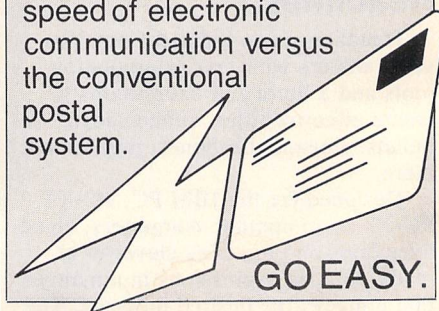
A giant "black book."

Get the electronic addresses of all CompuServe subscribers who wish to be listed in the Subscriber Directory.

GO DIRECTORY.

Easy does it.

EasyPlex Electronic Mail lets you enjoy the overnight speed of electronic communication versus the conventional postal system.



\$S WIN \$S

with our
SPORTS
Handicapping
Software



THOROUGHBRED/HARNESS Handicapping. \$29.95, enhanced. \$49.95.
GREYHOUND Handicapping. \$29.95, enhanced. \$49.95. Up to 13 entries analyzed: class, speed, times, odds, track, post, stretch, & finish positions. Pro Football System..\$39.95. Pro Basketball System.. \$49.95. Specify disk/tape: Apple II—ce, Atari, IBM PC, COM 64/128, TI, TRS-80 Mod 3/4, Mod 100/200, Color. Add \$2 p/h. MC/VISA accepted. Free info. SOFTWARE EXCHANGE, P.O. Box 5382-OL, W. Bloomfield, MI 48033. (313) 626-7208. Orders: 1-800-527-9467.

HELP!

Online help available by entering **HELP**



Post It!

Buy, sell, trade on a national bulletin board
GO BULLETIN

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *Online Today's* electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.

CompuServe Page OLI-1
 ONLINE TODAY ADVERTISERS
 ONLINE INQUIRY (OLI)

1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s).

The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
 ONLINE TODAY ADVERTISERS/OLI

1. Dec. 1987 Advertisers
2. Nov. 1987 Advertisers
3. Oct. 1987 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as December Hardware Reviews. At the next menu, select the product you're interested in. If you

answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
 REVIEW LISTINGS/PRINT EDITION

1. Dec. Hardware Listings
2. Dec. Software Listings
3. Dec. New Product Listings

Shopper's Guide

GO OLI-70 to get information about *Online Today's* mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
 SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information

***Note:** Additional requests during the same session will not require you to re-enter your name and address.

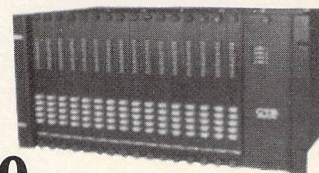
TIP

New Tax Law

To help you understand the new tax law, the IRS has two new publications. **Publication 920** explains changes affecting individuals and **Publication 921** explains changes affecting businesses. Both are free. Ask for one at any IRS office or call the IRS Tax Forms number in your phone book.



Money Machine



A revolutionary software package that runs under straight PC or MS-DOS to economically drive from 16 to 32 data lines, now offers an unparalleled array of revenue producing and money saving possibilities.

Smaller systems are currently being used for on-line order taking, paid real-time conferencing, electronic mail, along with a host of other micro-based information utilities.

This cost-effective approach has not only met, but is exceeding the data communications challenges of both smaller concerns as well as several leading Fortune 500 companies.

Complete information is available from the On-Line Store, P.O. Box 3197, Ventura, California 93003. Please include a brief note of your requirements, along with your phone number for any questions. Information, pricing, and technical details will be rushed via return mail.

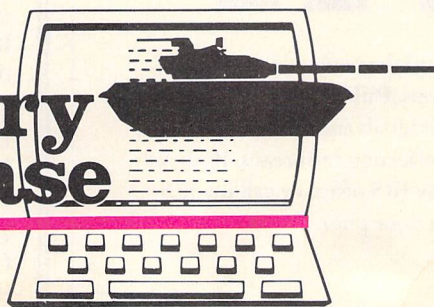
CompuServe members may reply to 70007,2126.

GO OLI or circle 26 on the Reader Service Form.

Sometimes You Need More Than Strategy. You Need Hard Facts.

Authoritative, Accurate, Timely, Essential

**USNI
Military
Database**



For more information call: (800) 443-7216

Developed by the Military Data Corp.
a subsidiary of Information Spectrum, Inc.

In Virginia, call: (703) 553-0208. USNI Military Database 1745 Jefferson Davis Highway, Suite 501 Arlington, Virginia 22202

GO OLI or circle 29 on the Reader Service Form.

I N F O R M A T I O N

The advertisers and manufacturers of the products appearing in Online Today will be pleased to send additional information about their products or services—at no cost to you. Make your selection by circling the advertiser or product by number on the form below. Fill in the requested information and mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376. Online Today will see that your requests are forwarded promptly. You may get a faster response by using the Online Inquiry service system. Simply enter GO OLI at any prompt on the CompuServe system and follow the OLI prompts. Your request will be forwarded.

Inquiry Number	Advertiser/Product	Page Number
	A-Comm Electronics, Inc.	60
	Adanced Transducer Devices	57
1	American Airlines	Cover 2
3	Americam Express	3
24	AutoVision	53
	Black Box Corp.	57
	Borland International	58
22	Broderbund Software	52
2	CACI/Instant Demographics	1
	Chenesko Products Inc.	57
	Clinical Communications	60
	Coffee Emporium	60
	Command Software Systems	58
15	Communication Electronics	45
	Communication Research Group	58
	Connect Computer Co. Inc.	59
19	Epyx	50
	EXWorld Travel	60
16	Foresight Resources Corp.	46
14	Genoa Systems Corp.	44
	G.E. Ridge Services	60
	Goldata Computer Services	58
20	Golden Bow Systems	51
6	Grolier	8
5	Hayes	6
12	Healthcom	35
	Hewlett-Packard Co.	59

Inquiry Number	Advertiser/Product	Page Number
	H&H Enterprises	59
	Inside*Outside	60
	Megahertz Corp.	57
	Microlytics, Techniplex	59
	Multi-Tech Systems Inc.	58
21	NEMR	51
4	Newsnet	5
28	Official Airline Guides	Cover 4
	OmniTel Inc.	57
26	Online Store	61
13	PaperChase	42
	Primages Inc.	59
	Protosoft	60
25	Quick & Reilly	55
	Serengeti Software	58
	Software Exchange	60
18	Software Publishing Corp.	48
11	Software Publishing Corp.	49
	Sysgen Inc.	58
27	Tandy	Cover 3
	The Salinon Corp.	59
8	Unified Management	11
7	Universal Data System	9
29	USNI	62
	Vericom	58
9	Westex	35
23	Zing	53
	Zoom Telephonics Inc.	57

R E A D E R I N Q U I R Y

For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

CompuServe subscribers can request information electronically by entering GO OLI at any prompt.

(Please print or type)

Name _____

Company Name _____

Address _____

City _____

State _____ ZIP _____ Business Phone _____

Circle inquiry number from this issue only

1	21	41	61	81
2	22	42	62	82
3	23	43	63	83
4	24	44	64	84
5	25	45	65	85
6	26	46	66	86
7	27	47	67	87
8	28	48	68	88
9	29	49	69	89
10	30	50	70	90
11	31	51	71	91
12	32	52	72	92
13	33	53	73	93
14	34	54	74	94
15	35	55	75	95
16	36	56	76	96
17	37	57	77	97
18	38	58	78	98
19	39	59	79	99
20	40	60	80	100

Mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

December issue, not valid after March 1988.

Learn to Ask the Right Questions

The other day I saw a phrase in a newspaper story that afforded me an opportunity to be smug. The line was, "Have you learned how to talk to a computer?"

We all can smile arrogantly at that one because even a beginning computerist knows there isn't a *single* way to talk to a computer. On the contrary, a computer speaks many different languages and dialects. How we communicate with it depends on what level we're speaking. Are we at the operating system level, trying to receive a directory of files? Are we in the middle of a word processing program trying to save our latest work? Are we writing our own programs? In BASIC? In Pascal? Assembly language?

The most frustrating and ultimately rewarding part of the relationship we forge with our digital associate is in learning to communicate with it—or more properly, with its assorted software—on the levels we need to talk. Learning to operate a good communications program, a word processor and a spreadsheet is a little like learning three foreign languages.

That part is exciting, but sometimes I wonder if, as we learn these sleek new ways to express ourselves, we are *unlearning* the primary language of CompuServe: good old-fashioned English. How else can we explain some of the notes that pop up on various forum message boards around the system? Praise be to forum administrators who keep their Job-like patience with questions such as:

- "I LOVE SYS, BUT PLEASE EXPLAIN XFER?"
- "Hello. I can't find what I'm looking for in Grolier's. Why?"
- "i give up. how do i config?"

Friends and neighbors, the software you're using to talk to your computer may be quite intuitive, but we humans are early models and require a little more data than that.

Ask a forum administrator why his or her hair is turning prematurely gray, and you'll find that the biggest problem in solving problems on CompuServe is a lack of background information. In other words, the questioner—whether asking about CompuServe features or the ins and outs of a specific piece of hardware or software—too often jumps into the middle of a technical problem without ever telling the basics. What

computer is being used? What software? Which version of the software? And specifically, what operation was being done when the problem occurred?

Have you ever been to New York and come back to tell friends what you saw in the big city only to find that none of you saw the *same* New York? CompuServe is a lot like that. Since we're all using different computers and different software and pursuing different interests online, we're all seeing different versions of CompuServe. For us to communicate at all about our online experiences, we need to provide reference points.

Nearly 100 forums are online. In most, forum administrators and experienced users are ready and willing to help you with your technical problems with hardware, software and applications and with the features of CompuServe itself. You can make that communications link work better if you follow these tips for leaving questions online:

- What computer? Literally, hundreds of different kinds of hardware access CompuServe from around the world. Perhaps the problem you're describing actually has nothing to do with your computer type, but it certainly doesn't hurt to add a line that says, "I'm running a Tandy 1000 with 640K of RAM, two floppy drives, a 10-meg hard disk, connected to a 1200-baud Prometheus modem." If it's IBM compatible, say so. And if you've added any boards or special fixes that might be contributing to the problem, mention them.
- What software? The communications program you're using creates the window through which you see CompuServe. Sometimes a forum administrator or a long-time member who is trying to help you with a problem can direct you to others online who are using the same program. But help depends on your saying up front what the program is, including the version number of the software.
- Avoid jargon. A shorthand has developed online for frequently used words—for instance, "w.p." for word processor, and "params" for parameters—and it's a coding system that serves us well in day-to-day electronic chatting. However, when

you're asking for help for a specific problem, that's the time to be verbose and detailed, not to show off your shorthand. Spell it out. Otherwise, the first replies you get to your question may be more questions:

"What the heck does 'PC4.2' mean?"

- What were you trying to do? It's much easier to answer online questions if the writer gives play-by-play details of what he was trying to do when the problem occurred, with specifics. For instance:

"I wanted to download GAMES.BAS from the IBMNEW forum (Data Library 3). I typed DL3 to get to the data library, and at the next prompt, I typed DOW GAMES.BAS. After the system displayed the menu of protocols, I selected XMODEM, then..."

Notice that in these three sentences, the questioner has illustrated that he already knows how to access the forum, how to get to the proper data library, how to use the DOWNLOAD command and how to select a transfer protocol. Those trying to solve his problem, seeing that everything was correct up to that point, then can focus on what probably is the real difficulty, the actual file transfer. Compare that with the teeth-gnashing, "I can't get GAMES.BAS. Help!"

- What did you see? Often problems online are accompanied by error messages from the system. Take note of these messages and include them in your note. Sometimes a savvy forum member can solve a problem in reverse, reasoning in effect, "The only way you can get that error is to do this and such..." and then step backward to the solution.

Finally, be patient. I suppose English isn't as precise as programming and applications languages, but, used conscientiously, it's more powerful. If you pose a question on the message board of a forum, be prepared to return regularly to elaborate and expand on it if asked. The reward for our diligence is that a fully detailed question ultimately may result in more than a solution to a specific problem—it also might end up being preserved in the forum's data library to help subscribers who come along later.

Charles Bowen, a contributing editor of Online Today, co-authored How to Get the Most Out of CompuServe and CompuServe for IBM PC Power Users. His CompuServe User ID number is 70007.411.

Tandy Computers:
Because there is
no better value.TM

Sale! The Tandy[®] 200

Save \$300 on this
powerful portable
computer—only \$499.

Gift priced for the holidays. Here's the perfect gift for busy executives, students and people on the move. The Tandy 200 provides the most commonly used features of a desktop computer in a much smaller—and much more affordable package.

Six built-in programs. The Tandy 200 is ready to go to work right away. Multiplan makes spreadsheet analysis a snap. The 200 can also be used as a personal word processor, an appointment calendar, address-and-phone directory and telephone auto dialer. Or write your own programs in BASIC.

And there's more . . . The 200's flip-top screen, with its 16 × 40 display and double-height characters, is designed for maximum legibility and ease of use. There's even a built-in direct-connect modem.

Come in today! Drop by your local Radio Shack today and pick up the perfect portable at this incredible sale price—the Tandy 200. (26-3860)

Sale ends December 24, 1987. Reg. \$799. Price applies at Radio Shack Computer Centers and participating stores and dealers. Multiplan/TM Microsoft Corp.

GO OLI or circle 27 on the Reader Service Form.

Radio Shack[®]
The Technology StoreTM

A DIVISION OF TANDY CORPORATION

**STAND IN LINE AT
THE AIRPORT.**

GO BACK TO THE
BEGINNING. YOU DIDN'T
CHECK OUT OAG'S
BOOKING CAPABILITY.

**CHECK AVAILABILITY
AND BOOK FLIGHT.
NOW YOU'RE MOVING!**

**ARRANGE FOR
CONVENIENT TICKETING.
YOU'RE ALMOST THERE!**

Win at the Travel Planning Game with the OAG Electronic Edition

**REQUEST CAR
RENTAL AND
HOTEL
RESERVATIONS.**

TAKE A
GIANT STEP
FORWARD!

**SELECT THE
LOWEST FARE**

KEEP
MOVING
AHEAD.

**FIND THE
BEST FLIGHTS
FOR YOUR NEEDS.**
MOVE AHEAD
ONE SPACE.

**START
HERE**

**VIEW HOTELS
WORLDWIDE—ON-LINE!
YOU'RE A WINNER!**



It's a smart move.

These days, you want to stay ahead of the travel planning game.

You want the best fares. The most convenient flights. And the best way to book your reservations and arrange for ticketing.

That's why today, more than ever, you want the OAG ELECTRONIC EDITION. You can check out virtually every flight in the world — plus thousands of North American and international fares ... and choose the lowest fare on the most convenient flight every time.

From there, it's a simple matter to check availability and book your flight 24 hours a day ... and arrange for ticketing. In fact, if you obtain your ticket through Thomas Cook Travel

U.S.A. — the OAG ELECTRONIC EDITION's exclusive travel agency — you can even request car rental and hotel reservations!

So make the OAG ELECTRONIC EDITION part of your travel planning game plan.

You'll always come out a winner!

On CompuServe, ENTER: GO OAG

Official Airline Guides

DB a company of
The Dun & Bradstreet Corporation

GO OLI or circle 28 on the Reader Service Form.